

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1208DXJ

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1		Web Page URLs for STN Seminar Schedule - N. America
NEWS 2	Apr 08	"Ask CAS" for self-help around the clock
NEWS 3	Jun 03	New e-mail delivery for search results now available
NEWS 4	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 5	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS 6	Aug 26	Sequence searching in REGISTRY enhanced
NEWS 7	Sep 03	JAPIO has been reloaded and enhanced
NEWS 8	Sep 16	Experimental properties added to the REGISTRY file
NEWS 9	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS 10	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985
NEWS 11	Oct 24	BEILSTEIN adds new search fields
NEWS 12	Oct 24	Nutraceuticals International (NUTRACEUT) now available on STN
NEWS 13	Nov 18	DKILIT has been renamed APOLLIT
NEWS 14	Nov 25	More calculated properties added to REGISTRY
NEWS 15	Dec 04	CSA files on STN
NEWS 16	Dec 17	PCTFULL now covers WP/PCT Applications from 1978 to date
NEWS 17	Dec 17	TOXCENTER enhanced with additional content
NEWS 18	Dec 17	Adis Clinical Trials Insight now available on STN
NEWS 19	Jan 29	Simultaneous left and right truncation added to COMPENDEX, ENERGY, INSPEC
NEWS 20	Feb 13	CANCERLIT is no longer being updated
NEWS 21	Feb 24	METADEx enhancements
NEWS 22	Feb 24	PCTGEN now available on STN
NEWS 23	Feb 24	TEMA now available on STN
NEWS 24	Feb 26	NTIS now allows simultaneous left and right truncation
NEWS 25	Feb 26	PCTFULL now contains images
NEWS 26	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS 27	Mar 20	EVENTLINE will be removed from STN
NEWS 28	Mar 24	PATDPAFULL now available on STN
NEWS 29	Mar 24	Additional information for trade-named substances without structures available in REGISTRY
NEWS 30	Apr 11	Display formats in DGENE enhanced
NEWS 31	Apr 14	MEDLINE Reload
NEWS 32	Apr 17	Polymer searching in REGISTRY enhanced
NEWS 33	Apr 21	Indexing from 1947 to 1956 being added to records in CA/CAPLUS
NEWS 34	Apr 21	New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX
NEWS 35	Apr 28	RDISCLOSURE now available on STN
NEWS 36	May 05	Pharmacokinetic information and systematic chemical names added to PHAR
NEWS EXPRESS		April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS		STN Operating Hours Plus Help Desk Availability
NEWS INTER		General Internet Information
NEWS LOGIN		Welcome Banner and News Items
NEWS PHONE		Direct Dial and Telecommunication Network Access to STN
NEWS WWW		CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 14:33:31 ON 15 MAY 2003 ✓

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 14:33:41 ON 15 MAY 2003

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 14 MAY 2003 HIGHEST RN 515808-31-8

DICTIONARY FILE UPDATES: 14 MAY 2003 HIGHEST RN 515808-31-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STN Note 27, Searching Properties in the CAS Registry File, for complete details:
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 964 AND 1015

L1 SCREEN CREATED

=> screen 1821 OR 1822 OR 1823 OR 1824

L2 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\981271str2.str

L3 STRUCTURE UPLOADED

=> que L3 AND L1 AND L2

L4 QUE L3 AND L1 AND L2

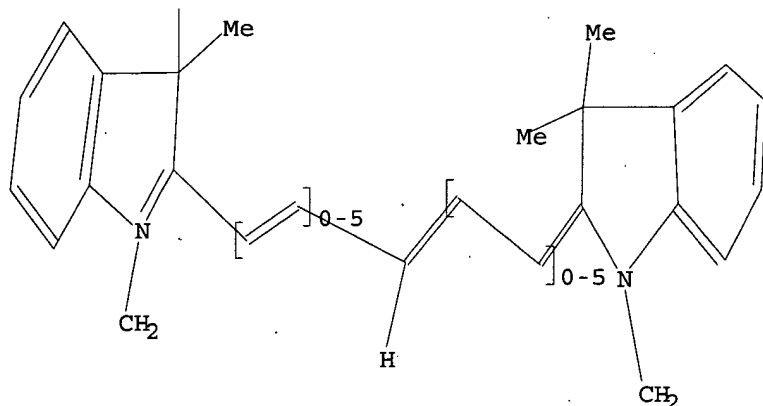
=> d

L4 HAS NO ANSWERS

L1 SCR 964 AND 1015

L2 SCR 1821 OR 1822 OR 1823 OR 1824

L3 STR



G1 O,S,N,Se

G2 A,H

Structure attributes must be viewed using STN Express query preparation.

L4 QUE ABB=ON PLU=ON L3 AND L1 AND L2

=> s l4

SAMPLE SEARCH INITIATED 14:34:10 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 409 TO ITERATE

100.0% PROCESSED 409 ITERATIONS

50 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 6967 TO 9393

PROJECTED ANSWERS: 2512 TO 4048

L5 50 SEA SSS SAM L3 AND L1 AND L2

=>Testing the current file..... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 964 AND 1015

L6 SCREEN CREATED

=> screen 1821 OR 1822 OR 1823 OR 1824

L7 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\981271str2.str

L8 STRUCTURE UPLOADED

<C

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Page 4

=> que L8 AND L6 AND L7

L9 QUE L8 AND L6 AND L7

=> s l9

SAMPLE SEARCH INITIATED 14:35:42 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 418 TO ITERATE

100.0% PROCESSED 418 ITERATIONS

9 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 7134 TO 9586

PROJECTED ANSWERS: 9 TO 360

L10 9 SEA SSS SAM L8 AND L6 AND L7

=> d scan

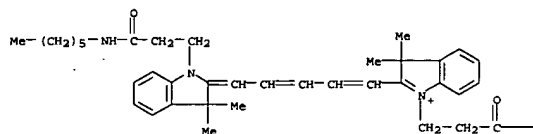
<C

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L10 9 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN 3H-Indolium, 1-[3-(hexylamino)-3-oxopropyl]-2-[5-[1-[3-(hexylamino)-3-oxopropyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-, perchlorate (9CI)
MP C43 H61 N4 O2 . Cl O4
CM 1

PAGE 1-A



PAGE 1-B

—NH—(CH₂)₅—Me

CM 2

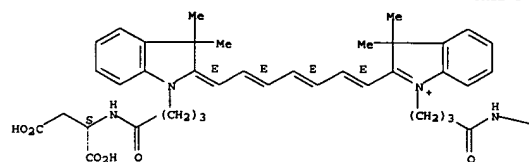


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

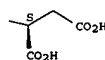
L10 9 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN 3H-Indolium, 1-[4-[[[(1S)-1,2-dicarboxyethyl]amino]-4-oxobutyl]-2-[[1E,3E,5E,7E]-7-[1-[4-[[[(1S)-1,2-dicarboxyethyl]amino]-4-oxobutyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl- (9CI)
MP C43 H51 N4 O10
CI COM

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A

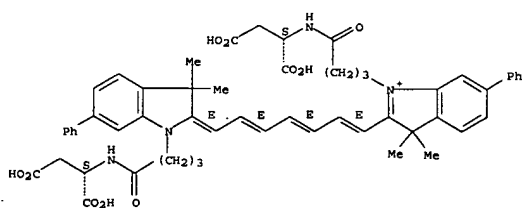


PAGE 1-B



L10 9 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN 3H-Indolium, 1-[4-[[[(1S)-1,2-dicarboxyethyl]amino]-4-oxobutyl]-2-[[1E,3E,5E,7E]-7-[1-[4-[[[(1S)-1,2-dicarboxyethyl]amino]-4-oxobutyl]-1,3-dihydro-3,3-dimethyl-6-phenyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-6-phenyl-, chloride (9CI)
MP C55 H59 N4 O10 . Cl

Absolute stereochemistry.
Double bond geometry as shown.



● Cl-

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2end
'2END' IS NOT VALID HERE

To display more answers, enter the number of answers you would like to see. To end the display, enter "NONE", "N", "0", or "END".
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

<C

09/981,271

Page 6

=> d his

(FILE 'HOME' ENTERED AT 14:33:31 ON 15 MAY 2003)

FILE 'REGISTRY' ENTERED AT 14:33:41 ON 15 MAY 2003

L1 SCREEN 964 AND 1015
L2 SCREEN 1821 OR 1822 OR 1823 OR 1824
L3 STRUCTURE UPLOADED
L4 QUE L3 AND L1 AND L2
L5 50 S L4
L6 SCREEN 964 AND 1015
L7 SCREEN 1821 OR 1822 OR 1823 OR 1824
L8 STRUCTURE UPLOADED
L9 QUE L8 AND L6 AND L7
L10 9 S L9

=> s l9 full

FULL SEARCH INITIATED 14:39:52 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 8458 TO ITERATE

100.0% PROCESSED 8458 ITERATIONS
SEARCH TIME: 00.00.01

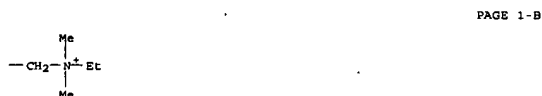
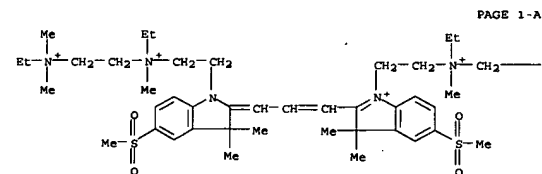
117 ANSWERS

L11 117 SEA SSS FUL L8 AND L6 AND L7

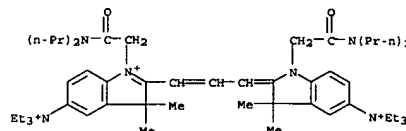
=> s l11 and caplus/lc
27887466 CAPLUS/LC

L12 101 L11 AND CAPLUS/LC

L13 ANSWER 1 OF 16 REGISTRY COPYRIGHT 2003 ACS
 RN 446263-49-6 REGISTRY
 CN 3H-Indolium,
 1-[2-[ethyl[2-(ethylidimethylammonio)ethyl]methylammonio]ethyl
 1-2-[3-[1-[2-[ethyl[2-(ethylidimethylammonio)ethyl]methylammonio]ethyl]-1,3-
 dihydro-3,3-dimethyl-5-(methylsulfonyl)-2H-indol-2-ylidene]-1-propenyl]-
 3,3-dimethyl-5-(methylsulfonyl)- (9CI) (CA INDEX NAME)
 MF C47 H81 N6 O4 S2
 CI COM
 SR CA

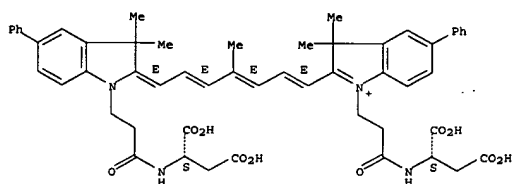


L13 ANSWER 2 OF 16 REGISTRY COPYRIGHT 2003 ACS
 RN 446263-41-8 REGISTRY
 CN 3H-Indolium,
 1-[2-(dipropylamino)-2-oxoethyl]-2-[3-[1-[2-(dipropylamino)-2-
 oxoethyl]-1,3-dihydro-3,3-dimethyl-5-(triethylammonio)-2H-indol-2-ylidene]-
 1-propenyl]-3,3-dimethyl-5-(triethylammonio)- (9CI) (CA INDEX NAME)
 MF C51 H83 N6 O2
 CI COM
 SR CA



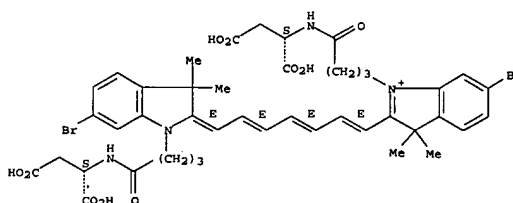
L13 ANSWER 3 OF 16 REGISTRY COPYRIGHT 2003 ACS
 RN 398459-00-2 REGISTRY
 CN 3H-Indolium, 1-[3-[[[(1S)-1,2-dicarboxyethyl]amino]-3-oxopropyl]-2-
 [[(1E,3E,5E,7E)-7-[1-[3-[[[(1S)-1,2-dicarboxyethyl]amino]-3-oxopropyl]-1,3-
 dihydro-3,3-dimethyl-5-phenyl-2H-indol-2-ylidene]-4-methyl-1,3,5-
 heptatrienyl]-3,3-dimethyl-5-phenyl- (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C54 H57 N4 O10
 CI COM
 SR CA

Absolute stereochemistry.
 Double bond geometry as shown.



L13 ANSWER 4 OF 16 REGISTRY COPYRIGHT 2003 ACS
 RN 398459-98-5 REGISTRY
 CN 3H-Indolium, 6-bromo-2-[[[(1E,3E,5E,7E)-7-[6-bromo-1-[4-[[[(1S)-1,2-
 dicarboxyethyl]amino]-4-oxobutyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-
 ylidene]-1,3,5-heptatrienyl]-1-[4-[[[(1S)-1,2-dicarboxyethyl]amino]-4-
 oxobutyl]-3,3-dimethyl- (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C43 H49 Br2 N4 O10
 CI COM
 SR CA

Absolute stereochemistry.
 Double bond geometry as shown.



L13 ANSWER 5 OF 16 REGISTRY COPYRIGHT 2003 ACS

RN 398458-95-2 REGISTRY

CN 3H-Indolium, 1-[5-[[[(1S)-1,2-dicarboxyethyl]amino]-5-oxopentyl]-2-
[(1E,3E,5E,7E)-7-[1-[5-[[[(1S)-1,2-dicarboxyethyl]amino]-5-oxopentyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-4-methyl-1,3,5-heptatrienyl]-3,3-
dimethyl- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

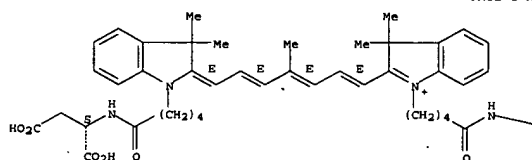
MF C46 H57 N4 O10

CI COM

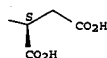
SR CA

Absolute stereochemistry.
Double bond geometry as shown.

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PAGE 1-B



L13 ANSWER 6 OF 16 REGISTRY COPYRIGHT 2003 ACS

RN 398458-93-0 REGISTRY

CN 3H-Indolium, 1-[4-[[[(1S)-1,2-dicarboxyethyl]amino]-4-oxobutyl]-2-
[(1E,3E,5E,7E)-7-[1-[4-[[[(1S)-1,2-dicarboxyethyl]amino]-4-oxobutyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-
(9CI) (CA INDEX NAME)

FS STEREOSEARCH

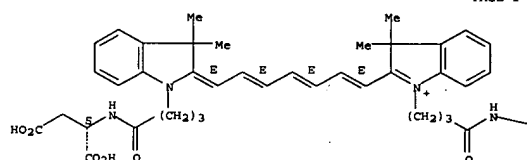
MF C43 H51 N4 O10

CI COM

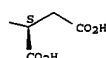
SR CA

Absolute stereochemistry.
Double bond geometry as shown.

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L13 ANSWER 7 OF 16 REGISTRY COPYRIGHT 2003 ACS

RN 296252-22-7 REGISTRY

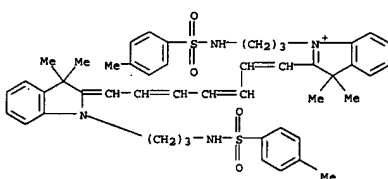
CN 3H-Indolium, 2-[7-[1,3-dihydro-3,3-dimethyl-1-[3-[[[(4-methylphenyl)sulfonyl]amino]propyl]-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-1-[3-[[[(4-methylphenyl)sulfonyl]amino]propyl]-
(9CI) (CA INDEX NAME)

FS 3D CONCORD

MF C47 H55 N4 O4 S2

CI COM

SR CA



L13 ANSWER 8 OF 16 REGISTRY COPYRIGHT 2003 ACS

RN 155205-80-4 REGISTRY

CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[2-[[[4-[methyl(1-methyl-2-phenylethyl)amino]butyl]amino]-2-oxoethyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[2-[[[4-[methyl(1-methyl-2-phenylethyl)amino]butyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

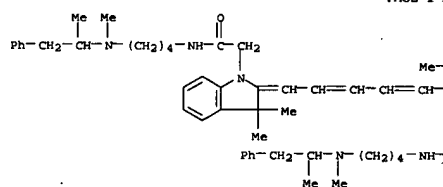
FS 3D CONCORD

MF C57 H75 N6 O2

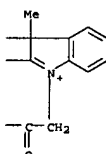
CI COM

SR CA

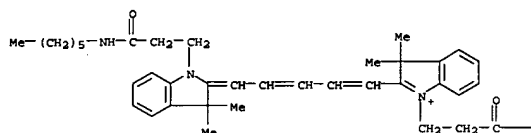
PAGE 1-A



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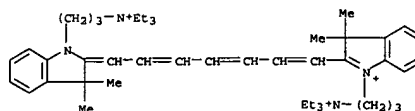
L13 ANSWER 9 OF 16 REGISTRY COPYRIGHT 2003 ACS
 RN 153249-58-2 REGISTRY
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 FS 3D CONCORD
 MF C43 H61 N4 O2
 CI COM
 SR CA



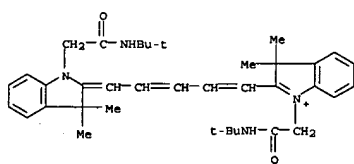
PAGE 1-B

—NH—(CH₂)₅—Me

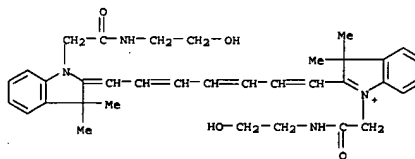
L13 ANSWER 10 OF 16 REGISTRY COPYRIGHT 2003 ACS
 RN 141473-21-4 REGISTRY
 CN 3H-Indolium, 2-[7-[1,3-dihydro-3,3-dimethyl-1-[3-(triethylammonio)propyl]-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-1-[3-(triethylammonio)propyl]- (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C45 H69 N4
 CI COM
 SR CA



L13 ANSWER 11 OF 16 REGISTRY COPYRIGHT 2003 ACS
 RN 139544-11-9 REGISTRY
 CN 3H-Indolium, 1-[2-[(1,1-dimethylethyl)amino]-2-oxoethyl]-2-[5-[1-[2-[(1,1-dimethylethyl)amino]-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl- (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C37 H49 N4 O2
 CI COM
 SR CA

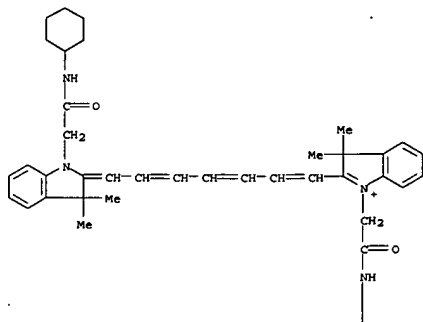


L13 ANSWER 12 OF 16 REGISTRY COPYRIGHT 2003 ACS
 RN 139543-89-8 REGISTRY
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 FS 3D CONCORD
 MF C35 H43 N4 O4
 CI COM
 SR CA



L13 ANSWER 13 OF 16 REGISTRY COPYRIGHT 2003 ACS
 RN 139543-87-6 REGISTRY
 CN 3H-Indolium, 1-[2-(cyclohexylamino)-2-oxoethyl]-2-[7-[1-(2-(cyclohexylamino)-2-oxoethyl)-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl- (9CI) (CA INDEX NAME)
 MF C43 H55 N4 O2
 CI COM
 SR CA

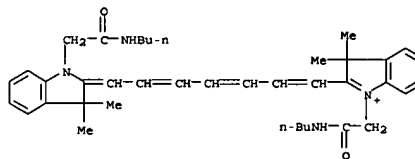
PAGE 1-A



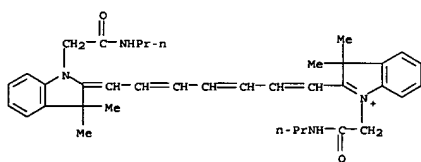
PAGE 2-A



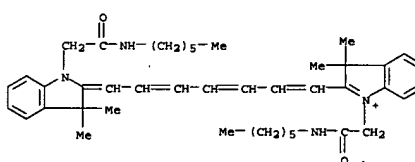
L13 ANSWER 14 OF 16 REGISTRY COPYRIGHT 2003 ACS
 RN 139543-83-2 REGISTRY
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 FS 3D CONCORD
 MF C39 H51 N4 O2
 CI COM
 SR CA



L13 ANSWER 15 OF 16 REGISTRY COPYRIGHT 2003 ACS
 RN 139543-81-0 REGISTRY
 CN 3H-Indolium, 2-[7-[1,3-dihydro-3,3-dimethyl-1-[2-oxo-2-(propylamino)ethyl]-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-1-[2-oxo-2-(propylamino)ethyl]- (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C37 H47 N4 O2
 CI COM
 SR CA



L13 ANSWER 16 OF 16 REGISTRY COPYRIGHT 2003 ACS
 RN 139543-76-3 REGISTRY
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 FS 3D CONCORD
 MF C43 H59 N4 O2
 CI COM
 SR CA



<C

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=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
189.07	189.28

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 14:42:58 ON 15 MAY 2003

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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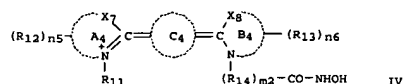
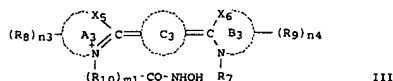
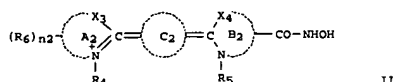
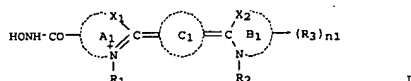
FILE COVERS 1907 - 15 May 2003 VOL 138 ISS 20
FILE LAST UPDATED: 14 May 2003 (20030514/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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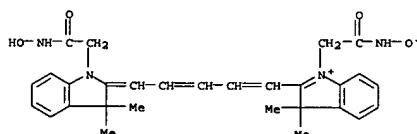
L15 ANSWER 1 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2003:22566 CAPLUS
 DOCUMENT NUMBER: 138:92819
 TITLE: Photoelectric converter
 INVENTOR(S): Horiuchi, Tamotsu; Ohashi, Minoru
 PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003007359	A2	20030110	JP 2001-186599	20010620
PRIORITY APPLN. INFO.: JP 2001-186599 20010620				
OTHER SOURCE(S): MARPAT 138:92819				
GI				

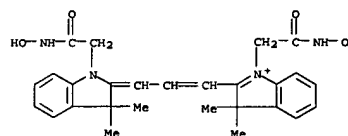


AB The photoelec. converter, for use in a photoelectrochem. cell, uses a hydroxamic acid group contg. cyanine dye as photoelec. converting material. The dye is selected from I - IV, where A1-4 and B1-4 = benzene rings or 5- or 6-membered heterocyclic rings, C1-4 = linear or cyclic bivalent conjugated double bond entities, R1, R2, R4, R5, R7, and R11 =

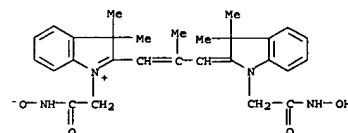
L15 ANSWER 1 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)



L15 ANSWER 1 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)
 alkyl groups which may have alkoxy, aryl, carboxyl, sulfonyl, phosphoryl, or hydroxamyl substituents, R10 and R14 = alkylene groups, R3, R6, R8, R9, R12 and R13 = halogen, alkyl, carboxyl, sulfonyl, phosphoryl, or hydroxamyl groups, X1-6 = O, S, Se, hydrocarbon, or (hydrocarbon substituted) amino groups, n1-n6 = integer 0-2, m1 and m2 = 0 or 1; and the dye may be a salt of the above structures.
 IT 484016-78-6 484016-79-7 484016-81-1
 RL: DEV (Device component use); USES (Uses)
 (titanium sensitized with hydroxamic acid group contg. cyanine dyes for photoelectrochem. cells)
 RN 484016-78-6 CAPLUS
 CN 3H-Indolium, 2-[3-[1,3-dihydro-1-[2-(hydroxyamino)-2-oxoethyl]-3,3-dimethyl-2H-indol-2-ylidene]-1-propenyl]-1-[2-(hydroxyamino)-2-oxoethyl]-3,3-dimethyl-, inner salt (9CI) (CA INDEX NAME)



RN 484016-79-7 CAPLUS
 CN 3H-Indolium, 2-[3-[1,3-dihydro-1-[2-(hydroxyamino)-2-oxoethyl]-3,3-dimethyl-2H-indol-2-ylidene]-2-methyl-1-propenyl]-1-[2-(hydroxyamino)-2-oxoethyl]-3,3-dimethyl-, inner salt (9CI) (CA INDEX NAME)



RN 484016-81-1 CAPLUS
 CN 3H-Indolium, 2-[5-[1,3-dihydro-1-[2-(hydroxyamino)-2-oxoethyl]-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-1-[2-(hydroxyamino)-2-oxoethyl]-3,3-dimethyl-, inner salt (9CI) (CA INDEX NAME)

L15 ANSWER 2 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2002:609715 CAPLUS
 DOCUMENT NUMBER: 137:177097
 TITLE: Photopolymerizable composition containing organic borate photopolymerization initiator for photoimaging recording material
 INVENTOR(S): Takashima, Masanobu; Fukushima, Yuichi; Hanasaki, Kyoko
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 49 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002229197	A2	20020814	JP 2001-25901	20010201
PRIORITY APPLN. INFO.: JP 2001-25901 20010201				
OTHER SOURCE(S): MARPAT 137:177097				

AB The photopolymerizable compn. comprises a polymerizable compd. having an ethylenic unsatd. bond and a dye represented by D-[L-R]m (D = cationic dye

residue, nonionic dye residue; L = divalent bonding group, single bond; R = R1R2R3N+X-, R4R5S+X-, R6R7R8P+X-; R1-8 = aliph., arom., H; and m = integer greater than 1). The dye may include cyanines, hemicyanines, merocyanines, hemioxonols, and coumarins. The photopolym. initiator is an org. borate represented by R1R1R2R3R4B-G+ (R11-14 = aliph., arom., heterocyclyl, etc.; and G+ = cation). Also claimed is a recording material comprising a color-forming component (A) encapsulated in a microcapsule and a color-forming component (B) which contains the polymerizable compd. and is reactive with (A). The photopolymerizable compn. showed high sensitivity not only to UV light but also to light ranging from visible to IR light.

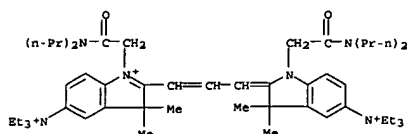
IT 446263-42-9 446263-50-9
 RL: TBM (Technical or engineered material use); USES (Uses)
 (dye; Photopolymerizable compn. contg. dye and org. borate photopolym. initiator for photoimaging recording material)

RN 446263-42-9 CAPLUS
 CN 3H-Indolium, 1-[2-(dipropylamino)-2-oxoethyl]-2-[3-[1-[2-(dipropylamino)-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-5-(triethylammonio)-2H-indol-2-ylidene]-1-propenyl]-3,3-dimethyl-5-(triethylammonio)-, salt with trifluoromethanesulfonic acid (1:3) (9CI) (CA INDEX NAME)

CM 1

CRN 446263-41-8
 CMF C51 H83 N6 O2

L15 ANSWER 2 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)



CM 2

CRN 37181-39-8
CMF C F3 O3 S



RN 446263-50-9 CAPLUS

CN 3H-Indolium,

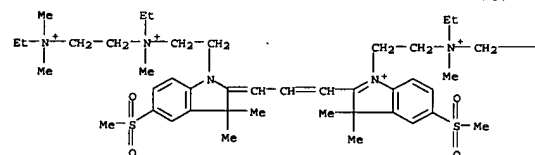
1-[2-[(ethyl[2-(ethylidimethylammonio)ethyl]methylammonio)ethyl]

]-2-[3-[[1-[2-[(ethyl[2-(ethylidimethylammonio)ethyl]methylammonio)ethyl]-1,3-dihydro-3,3-dimethyl-5-(methylsulfonyl)-2H-indol-2-ylidene]-1-propenyl]-3,3-dimethyl-5-(methylsulfonyl)-, salt with trifluoromethanesulfonic acid (1:5) (9CI) (CA INDEX NAME)

CM 1

CRN 446263-49-6
CMF C47 H81 N6 O4 S2

PAGE 1-A



L15 ANSWER 3 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:121132 CAPLUS

DOCUMENT NUMBER: 136:191625

TITLE: Cyanine dyes suitable as filter or antihalation dyes in photographic elements

INVENTOR(S): Kawakami, Masayuki; Kitaguchi, Hiroshi

PATENT ASSIGNER(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

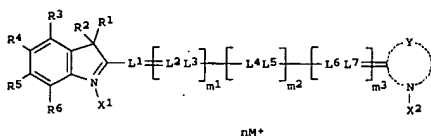
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002012398	A1	20020214	WO 2001-JP6689	20010803
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RM:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2001076723	A5	20020218	AU 2001-76723	20010803
EP 1308480	A1	20030507	EP 2001-95430	20010803
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
PRIORITY APPLN. INFO.:			JP 2000-240144	A 20000808
			JP 2000-240145	A 20000808
			JP 2000-331018	A 20001030
			JP 2001-87914	A 20010326
			WO 2001-JP6689	W 20010803

OTHER SOURCE(S): MARPAT 136:191625

GI



nM+

I

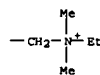
AB The invention relates to cyanine dye compds. of the general formula I (R1,

R2 = alkyl, aryl; R3-6 = H, alkyl, aryl, heteroaryl, halo, cyano, carboxyl, sulfo; X1, X2 = Cl-15 alkyl, aryl, with the proviso that the total no. of carboxyl groups present in X1 and X2 is four or below; m1, m2, m3 = 0, 1; L1-7 = methine; M = H, metal, quaternary ammonium salt; Y

nonmetal elements necessary for forming 5- to 10-membered heterocycle; n

L15 ANSWER 2 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-B



CM 2

CRN 37181-39-8
CMF C F3 O3 S



L15 ANSWER 3 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

1-7 for neutralizing the charge.) or salts thereof, useful in the prodn. of Ag halide photog. sensitive materials as filter dyes or as antihalation dyes.

IT 398459-02-4P

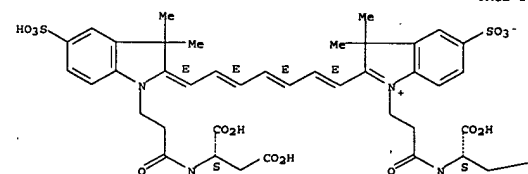
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(cyanine dyes suitable as filter or antihalation dyes in photog. elements)

RN 398459-02-4 CAPLUS

CN 3H-Indolium, 1-[3-[[[1,2-dicarboxyethyl]amino]-3-oxopropyl]-2-[[1,3,5,7E,7E]-7-[[1-[3-[[[1,2-dicarboxyethyl]amino]-3-oxopropyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-5-sulfo-, inner salt, pentapotassium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



5 K

PAGE 1-B

-CO2H

IT 398458-94-1P 398458-96-3P 398458-97-4P

398458-99-6P 398459-01-3P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

L15 ANSWER 3 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)
 (prepn. of cyanine dyes suitable as filter or antihalation dyes in
 photog. elements)
 RN 398458-94-1 CAPLUS
 CN 3H-Indolium, 1-[4-[[[(1S)-1,2-dicarboxyethyl]amino]-4-oxobutyl]-2-
 [(1E,3E,5E,7E)-7-[1-[4-[[[(1S)-1,2-dicarboxyethyl]amino]-4-oxobutyl]-1,3-

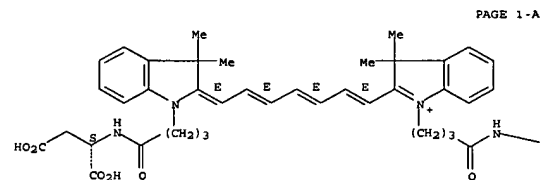
dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-
 , salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

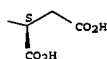
CRN 398458-93-0

CMF C43 H51 N4 O10

Absolute stereochemistry.
 Double bond geometry as shown.



PAGE 1-B



CM 2

CRN 144777-72-6

CMF C2 F3 O2

L15 ANSWER 3 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

CM 2

CRN 144777-72-6

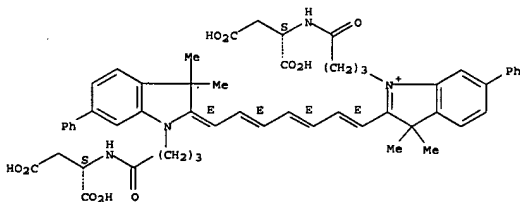
CMF C2 F3 O2



RN 398458-97-4 CAPLUS
 CN 3H-Indolium, 1-[4-[[[(1S)-1,2-dicarboxyethyl]amino]-4-oxobutyl]-2-
 [(1E,3E,5E,7E)-7-[1-[4-[[[(1S)-1,2-dicarboxyethyl]amino]-4-oxobutyl]-1,3-

dihydro-3,3-dimethyl-6-phenyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-
 dimethyl-6-phenyl-, chloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



● Cl⁻

RN 398458-99-6 CAPLUS
 CN 3H-Indolium, 6-bromo-2-[(1E,3E,5E,7E)-7-[6-bromo-1-[4-[[[(1S)-1,2-
 dicarboxyethyl]amino]-4-oxobutyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-
 ylidene]-1,3,5-heptatrienyl]-1-[4-[[[(1S)-1,2-dicarboxyethyl]amino]-4-
 oxobutyl]-3,3-dimethyl-, salt with trifluoroacetic acid (1:1) (9CI) (CA
 INDEX NAME)

CM 1

CRN 398458-98-5

CMF C43 H49 Br2 N4 O10

Absolute stereochemistry.
 Double bond geometry as shown.

L15 ANSWER 3 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)



RN 398458-96-3 CAPLUS

CN 3H-Indolium, 1-[5-[[[(1S)-1,2-dicarboxyethyl]amino]-5-oxopentyl]-2-
 [(1E,3E,5E,7E)-7-[1-[5-[[[(1S)-1,2-dicarboxyethyl]amino]-5-oxopentyl]-1,3-

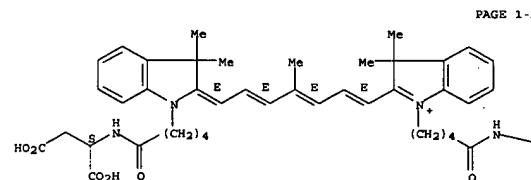
dihydro-3,3-dimethyl-2H-indol-2-ylidene]-4-methyl-1,3,5-heptatrienyl]-3,3-
 dimethyl-, salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

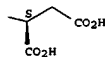
CRN 398458-95-2

CMF C46 H57 N4 O10

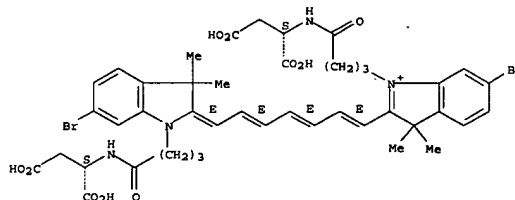
Absolute stereochemistry.
 Double bond geometry as shown.



PAGE 1-B



L15 ANSWER 3 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)



CM 2

CRN 144777-72-6

CMF C2 F3 O2



RN 398459-01-3 CAPLUS

CN 3H-Indolium, 1-[3-[[[(1S)-1,2-dicarboxyethyl]amino]-3-oxopropyl]-2-
 [(1E,3E,5E,7E)-7-[1-[3-[[[(1S)-1,2-dicarboxyethyl]amino]-3-oxopropyl]-1,3-
 dihydro-3,3-dimethyl-5-phenyl-2H-indol-2-ylidene]-4-methyl-1,3,5-
 heptatrienyl]-3,3-dimethyl-5-phenyl-, salt with trifluoroacetic acid

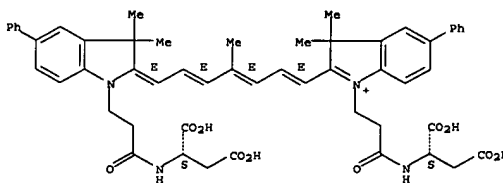
(1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 398459-00-2

CMF C54 H57 N4 O10

Absolute stereochemistry.
 Double bond geometry as shown.



L15 ANSWER 3 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

CM 2

CRN 14477-72-6
CMF C2 F3 O2

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L15 ANSWER 4 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:818766 CAPLUS
DOCUMENT NUMBER: 136:98660
TITLE: Site-specific incorporation of fluorescent probes into

AUTHOR(S):

CORPORATE SOURCE:

SOURCE:

PUBLISHER:

DOCUMENT TYPE:

LANGUAGE:

AB Structural and mechanistic characterization of proteins by fluorescence resonance energy transfer (FRET) requires the ability to incorporate fluorescent probes at specific, defined sites. In this article the authors report a strategy that permits labeling of termini or internal sites, that permits insitu labeling, and that is compatible with a large range of fluorochromes with different spectroscopic and photophysics properties. This strategy involves use of the "hexahistidine tag" i.e., the amino acid sequence His6- to target site-specific fluorescent labeling. The hexahistidine tag is known to interact tightly with transition-metal complexes, including Ni²⁺: nitrilotriacetic acid (Ni²⁺:NTA).

IT 389059-73-8P 389059-74-9P

RL: ARU (Analytical role, unclassified); SPN (Synthetic preparation);

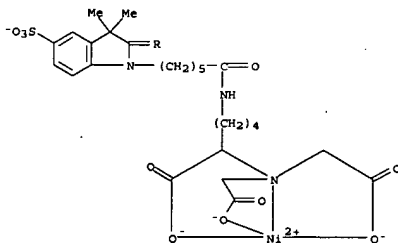
ANST (Analytical study); PREP (Preparation)
(site-specific incorporation of fluorescent probes into protein)

RN 389059-73-8 CAPLUS

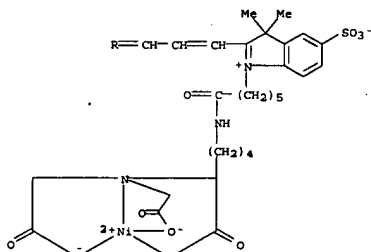
CN Nickelate(3-), [mu.-[1-[6-[[5-[bis[(carboxy-.kappa.O)methyl]amino-.kappa.N]-5-(carboxy-.kappa.O)pentyl]amino]-6-oxohexyl]-2-[3-[1-[6-[[5-[bis[(carboxy-.kappa.O)methyl]amino-.kappa.N]-5-(carboxy-.kappa.O)pentyl]amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1-propenyl]-3,3-dimethyl-5-sulfo-3H-indoliumato(8-)]di- (9CI) (CA INDEX NAME)

L15 ANSWER 4 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-A



PAGE 2-A

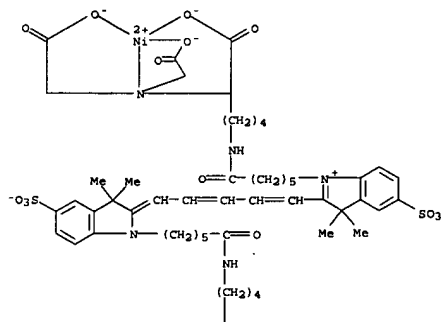


RN 389059-74-9 CAPLUS

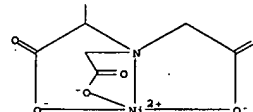
CN Nickelate(3-), [mu.-[1-[6-[[5-[bis[(carboxy-.kappa.O)methyl]amino-.kappa.N]-5-(carboxy-.kappa.O)pentyl]amino]-6-oxohexyl]-2-[5-[1-[6-[[5-[bis[(carboxy-.kappa.O)methyl]amino-.kappa.N]-5-(carboxy-.kappa.O)pentyl]amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-5-sulfo-3H-indoliumato(8-)]di- (9CI) (CA INDEX NAME)

L15 ANSWER 4 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-A



PAGE 2-A



REFERENCE COUNT: 24
THIS

THERE ARE 24 CITED REFERENCES AVAILABLE FOR
RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L15 ANSWER 5 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:208289 CAPLUS

DOCUMENT NUMBER: 134:247912

TITLE: Charge-modified nucleotide terminators and their use in sequencing and virus inhibition

INVENTOR(S): Kumar, Shiv; Plick, Parke; Nelson, John; Finn, Patrick; Nampalli, Satyaam; Bull, Matthew

PATENT ASSIGNEE(S): Amersham Pharmacia Biotech, Inc., USA

SOURCE: PCT Int. Appl., 70 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001019841	A1	20010322	WO 2000-US25433	20000916
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1214332	A1	20020619	EP 2000-963540	20000916
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				

PRIORITY APPLN. INFO.: US 1999-154739P P 19990917

WO 2000-US25433 W 20000916

AB Charge-modified nucleic acid terminators comprising Z-X-S-B-L (I; Z = mono-, di-, triphosphate, thiophosphate, boranophosphate; X = O, CH₂, S, NH; S = sugar, sugar analog; B = naturally occurring or synthetic base; L = alkyl, alkenyl, alkynyl optionally substituted with reporter moiety; Z, B, S, X, or Z are substituted with a moiety which imparts a net neg. charge or a net pos. charge to structure I at physiolo. or nucleic acid sequencing conditions. A method of sequencing nucleic acids using the above charge-modified terminators, as well as a method of inhibiting a virus which comprises contacting a cell infected with a virus

with a virus-inhibiting amt. of the above charge-modified terminator are also disclosed. Thus, many I compds. in which Z = triphosphate, X = O, S = 2',3'-dideoxyribose, and B = A, C, T, or U (i.e., ddNTPs) were prep'd. and employed in DNA sequencing reactions. Because of the charge on the ddNTP deriva., thermal breakdown products of these compds. were sepd. from the sequencing ladder, thereby facilitating reading of the sequencing data.

IT 330680-07-4P
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(charge-modified nucleotide terminators and their use in sequencing and virus inhibition)

and virus inhibition)

RN 330680-07-4 CAPLUS

L15 ANSWER 6 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:152853 CAPLUS

DOCUMENT NUMBER: 134:204343

TITLE: Tag DNA polymerases containing substitution at position 681 (E.fwdarw.R), their sequences, recombinant production, and use in DNA sequencing

INVENTOR(S): Davis, Maria; Nelson, John; Kumar, Shiv; Finn, Patrick

PATENT ASSIGNEE(S): J.; Nampalli, Satyaam; Plick, Parke

SOURCE: Amersham Pharmacia Biotech Inc., USA

PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001014568	A1	20010301	WO 2000-US22150	20000810
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1210440	A1	20020605	EP 2000-955487	20000810
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003507072	T2	20030225	JP 2001-518880	20000810

PRIORITY APPLN. INFO.: US 1999-154739P P 19990917

US 1999-150167P P 19990821

WO 2000-US22150 W 20000810

AB The invention provides two recombinant thermostable Tag DNA polymerases, referred to as Tag.DELTA.271/F272M/F667Y/E681R and Tag.D18A/E681R/F667Y, which have a substantial improvement of signal uniformity when used in

DNA sequencing reactions. The invention relates that these DNA polymerases contain a novel substitution at 681, glutamic acid to arginine (E.fwdarw.R). The invention also provides for nucleic acid mols. encoding said DNA polymerases, DNA vectors contg. said nucleic acid mols., and

host cells (such as Escherichia coli) transformed with said DNA vectors. The invention further provides for the: (1) use of said thermostable DNA polymerases in DNA sequencing; (2) synthesis of fluorescently labeled polynucleotides using said DNA polymerases, and (3) a kit for sequencing DNA comprising said DNA polymerases and nucleic acid terminators having a net neg. or net pos. charge. Finally, the invention provides the amino acid sequences of DNA polymerases Tag.DELTA.271/F272M/F667Y/E681R and Tag.D18A/E681R/F667Y, which are based on the sequence from Thermus aquaticus. The invention related these recombinant DNA polymerases possess improved salt tolerance and showed that they can modulate the incorporation of terminators having a net pos. or a net neg. charge during the sequencing reaction.

IT 328252-54-6P

RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation);

PROC

L15 ANSWER 5 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

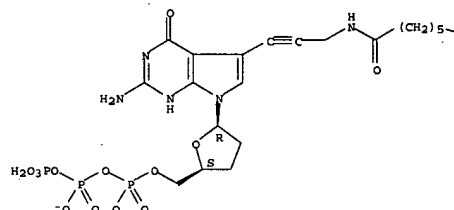
CN 3H-Indolium, 2-[3-[1-[6-[[[3-[2-amino-4,7-dihydro-4-oxo-7-[(2R,5S)-tetrahydro-5-(3,5,7,7-tetrahydroxy-3,5,7-trioxido-2,4,6-trioxo-3,5,7-triphosphahex-1-yl)-2-furanyl]-1H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-

propynyl]amino]-6-oxohexyl]amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1-propenyl]-3,3-dimethyl-1-[3-(triethylammonio)propyl]-, bis(inner salt) (9CI) (CA INDEX NAME)

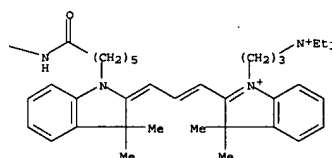
Absolute stereochemistry.

Double bond geometry unknown.

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS

FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L15 ANSWER 6 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

(Process)
(Tag DNA polymerases contg. substitution at position 681 (E.fwdarw.R), their sequences, recombinant prodn. and use in DNA sequencing)

RN 328252-54-6 CAPLUS

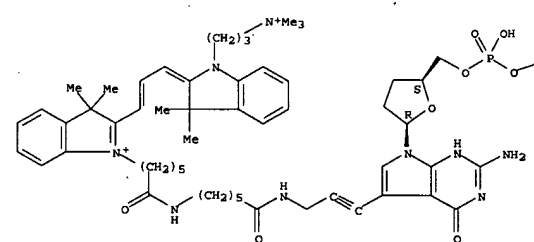
CN 3H-Indolium, 2-[3-[1-[6-[[[3-[2-amino-4,7-dihydro-4-oxo-7-[(2R,5S)-tetrahydro-5-(3,5,7,7-tetrahydroxy-3,5,7-trioxido-2,4,6-trioxo-3,5,7-triphosphahex-1-yl)-2-furanyl]-1H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-

propynyl]amino]-6-oxohexyl]amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1-propenyl]-3,3-dimethyl-1-[3-(trimethylammonio)propyl]-, bis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L15 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:686593 CAPLUS

DOCUMENT NUMBER: 133:259371

TITLE: Materials for direct IR laser imaging for lithographic

INVENTOR(S): printing plates
Nakamura, Tatsuo; Kunita, Kazuhito

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 41 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000267265	A2	20000929	JP 1999-66733	19990312

PRIORITY APPLN. INFO.: JP 1999-66733 19990312

AB The materials contain at least (A) IR-absorbing dyes sol. to org.

solvents and aq. alkali and (B) polymers insol. to water and sol. to aq. alkali for

pos. image formation by IR irradiation. Also claimed materials contain (A), (B), (C) heat-acid generators, and (D) agents for crosslinking by acids for neg. image formation by IR irradiation. The materials provide high sensitivity and image storage stability.

IT 296252-23-89

RL: DEV (Device component use); PNU (Preparation, unclassified); PREP

(Preparation); USES (Uses)

(dye; IR laser-sensitive image forming material contg. dyes and alkali-sol. polymers for lithog. printing plates)

RN 296252-23-8 CAPLUS

CN 3H-Indolium, 2-[7-[1,3-dihydro-3,3-dimethyl-1-[3-[[4-(4-methylphenyl)sulfonyl]amino]propyl]-2H-indol-2-ylidene]-1,3,5-

heptatrienyl]-3,3-dimethyl-1-[3-[[4-(4-methylphenyl)sulfonyl]amino]propyl]-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 296252-22-7

CMF C47 H55 N4 O4 S2

L15 ANSWER 8 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:686330 CAPLUS

DOCUMENT NUMBER: 133:263532

TITLE: Fluorescent group containing carbodiimides, their

precursors and methods for their production

Kimura, Naoki; Shiohata, Namiko; Yoshikawa, Yoko

PATENT ASSIGNEE(S): Nissinbo Industries, Inc., Japan

SOURCE: Eur. Pat. Appl., 26 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1038938	A2	20000927	EP 2000-302335	20000322

EP 1038938 A3 20010620

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO

JP 2001172259 A2 20010626

JP 2000-87013 20000327

PRIORITY APPLN. INFO.: JP 1999-81666 A 19990325

JP 1999-284107 A 19991005

OTHER SOURCE(S): MARPAT 133:263532

AB Fluorescent group-contg. carbodiimide compd. precursors having a halogen atom or a sulfonic acid group are described, as are fluorescent group-contg. carbodiimide compds. having a group selected from a carboxyl group, a sulfo group, a phosphono group and a phospho group which

have substituents selected from alkali metals, alk. earth metals, or a basic group contg. a nitrogen or phosphorus atom. Methods for producing the fluorescent group-contg. carbodiimide compd. precursors are described which entail synthesizing a (thio)urea compd., halogenating or

sulfonating the (thio)urea compd., and carbodiimidating the resulting compd. Methods for producing the fluorescent group-contg. carbodiimide compds. are also described. Methods for detecting a nucleic acid by hybridization utilizing a nucleic acid labeled with a labeling substance, which use the fluorescent group-contg. carbodiimide compds. as the labeling substance are also described.

IT 296764-82-4P 296764-84-6P 296764-89-1P

RL: ARG (Analytical reagent use); IMP (Industrial manufacture); PRP

(Properties); ANST (Analytical study); PREP (Preparation); USES (Uses)

(fluorescent group-contg. carbodiimides and their precursors and methods for their prodn. and their use as fluorescent markers in DNA

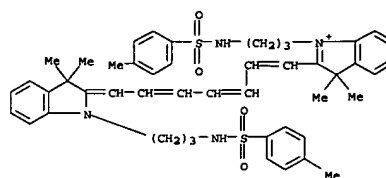
hybridization)

RN 296764-82-4 CAPLUS

CN 3H-Indolium, 1-[6-[[3-(dimethylamino)propyl]amino]-6-oxohexyl]-2-[3-[1-[6-[[3-(dimethylamino)propyl]amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1-propenyl]-3,3-dimethyl-5-sulfo-, inner salt, dipotassium salt (9CI) (CA INDEX NAME)

L15 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2003 ACS

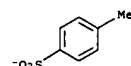
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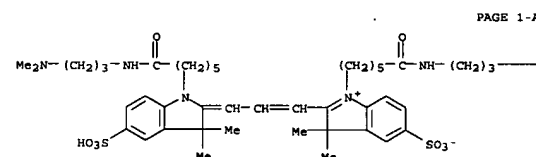
CRN 16722-51-3

CMF C7 H7 O3 S



L15 ANSWER 8 OF 52 CAPLUS COPYRIGHT 2003 ACS

(Continued)



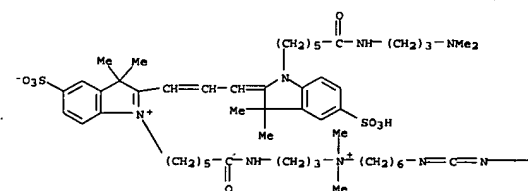
2 K

-NMe2

RN 296764-84-6 CAPLUS

CN 3H-Indolium, 2-[3-[1-[6-[[3-(dimethylamino)propyl]amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1-propenyl]-1-[11,11-dimethyl-2,3-(4-methylmorpholinium-4-yl)-6-oxo-7,18,20-triaza-11-azoniatricosa-18,19-dien-1-yl]-3,3-dimethyl-5-sulfo-, inner salt, diiodide, dipotassium salt (9CI) (CA INDEX NAME)

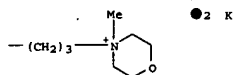
PAGE 1-A



2 I-

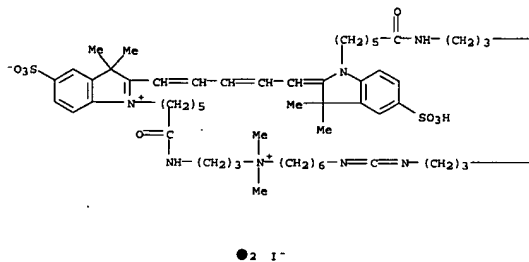
L15 ANSWER 8 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-B



RN 296764-89-1 CAPLUS
 CN 3H-Indolium, 2-[5-[1-[6-[[3-(dimethylamino)propyl]amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-dimethyl-23-(4-methylmorpholinium-4-yl)-6-oxo-7,18,20-triaza-11-azoniatricosa-18,19-dien-1-yl]-3,3-dimethyl-5-sulfo-, inner salt, diiodide, dipotassium salt (9CI) (CA INDEX NAME)

PAGE 1-A



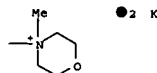
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L15 ANSWER 8 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

L15 ANSWER 8 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

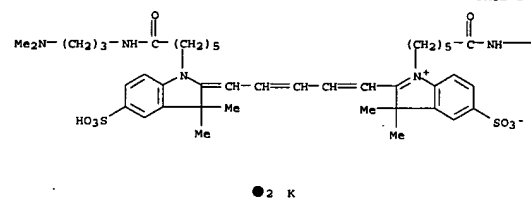
PAGE 1-B

NMe2



IT 296764-87-9P
 RI: IMP (Industrial manufacture); PRP (Properties); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (fluorescent group-contg. carbodiimides and their precursors and methods for their prodn. and their use as fluorescent markers in DNA hybridization)
 RN 296764-87-9 CAPLUS
 CN 3H-Indolium, 1-[6-[[3-(dimethylamino)propyl]amino]-6-oxohexyl]-2-[5-[1-[6-[[3-(dimethylamino)propyl]amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-5-sulfo-, inner salt, dipotassium salt (9CI) (CA INDEX NAME)

PAGE 1-A



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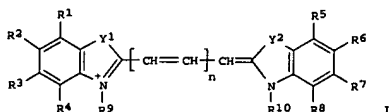
PAGE 1-B

(CH2)3-NMe2

L15 ANSWER 9 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:623740 CAPLUS
 DOCUMENT NUMBER: 133:224250
 TITLE: Cyanine dyes and synthesis methods thereof
 INVENTOR(S): Randall, Malcolm Harry; Buzby, Philip Richard; Erickson, Thomas Joseph; Trometer, Joseph David; Miller, Joseph John, Jr.; Ahern, David George;
 Bobrow, Mark Norman
 PATENT ASSIGNEE(S): Nen Life Science Products, Inc., USA
 SOURCE: U.S., 12 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

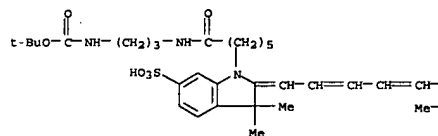
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6114350	A	20000905	US 1999-294678	19990419
US 6197956	B1	20010306	US 1999-449333	19991124
US 6204389	B1	20010320	US 1999-448241	19991124
US 6224644	B1	20010501	US 1999-448242	19991124
CA 2335240	AA	20001026	CA 2000-2335240	20000419
WO 2000063296	A2	20001026	WO 2000-US10533	20000419
WO 2000063296	A3	20010215		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GR, GU, HK, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1112254	A2	20010704	EP 2000-923522	20000419
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002542365	T2	20021210	JP 2000-612377	20000419
US 2001020098	A1	20010906	US 2001-824316	20010402
US 6437141	B2	20020820		
PRIORITY APPLN. INFO.: US 1999-294678 A3 19990419 US 1999-448242 A1 19991124 WO 2000-US10533 W 20000419				
OTHER SOURCE(S): CASREACT 133:224250; MARPAT 133:224250.				
GI				



AB Cyanine dyes (I) are prepd. where R1-R8 are each independently selected from a group consisting of H, C1-C6 alkyl group, and C0-C4 alkyl having

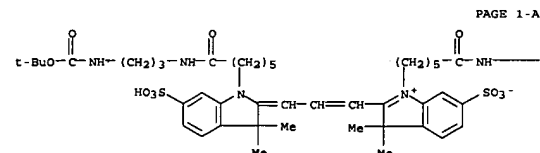
L15 ANSWER 9 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)
 a hydrophilic substituent; R9 and R10 are selected from protected thiol, amine or hydroxyl substituent capable of reacting with a target mol. through a nucleophilic displacement mechanism; Y1 and Y2 = substituted C, O, N, S; and n = .gtoreq.1. The dyes are useful in labeling a variety of target mols. Processes are described for synthesizing suitable heterocyclic and indole derive. as precursors for the cyanine dyes.
 IT 291314-69-7P 291314-72-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (dye; prepn. of cyanine dyes and their use as labels for target mols.)
 RN 291314-69-7 CAPLUS
 CN 3H-Indolium,
 1-[6-[[3-[[[(1,1-dimethylethoxy)carbonyl]amino]propyl]amino]-6-oxohexyl]-2-[3-[1-[6-[[3-[[[(1,1-dimethylethoxy)carbonyl]amino]propyl]amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-6-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-6-sulfo-, inner salt, monopotassium salt (9CI)
 (CA INDEX NAME)

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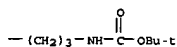
● K

PAGE 1-B



● K

PAGE 1-B



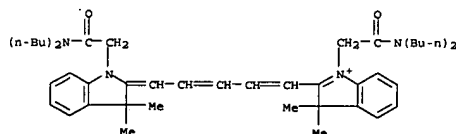
RN 291314-72-2 CAPLUS
 CN 3H-Indolium,
 1-[6-[[3-[[[(1,1-dimethylethoxy)carbonyl]amino]propyl]amino]-6-oxohexyl]-2-[5-[1-[6-[[3-[[[(1,1-dimethylethoxy)carbonyl]amino]propyl]amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-6-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-6-sulfo-, inner salt, monopotassium salt (9CI)
 (CA INDEX NAME)

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L15 ANSWER 10 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2000:600538 CAPLUS
 DOCUMENT NUMBER: 133.200879
 TITLE: Photopolymerizable composition for recording materials
 INVENTOR(S): Takashima, Masanobu; Noro, Masaki; Fukushige, Yuichi; Matsumoto, Hirotaka
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, '68 pp.
 CODEN: JKXUAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

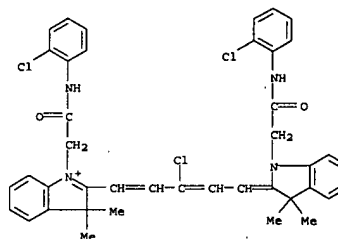
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000235262	A2	20000829	JP 1999-323838	19991115
PRIORITY APPLN. INFO:			JP 1998-356543	A 19981215

AB The photopolymerizable compn. contains a polymerizable compd. having ethylenic groups and a dye prepd. from a reaction of an electron donating color less dye and an electron accepting compd., and a radical generating compd., which generates a radical by reacting with the dye. The photopolymerizable compn. is sensitive not only UV but also visible to IR light.
 IT 289037-12-3 289037-16-7
 RL: TEM (Technical or engineered material use); USES (Uses)
 (photopolymerizable compn.)
 RN 289037-12-3 CAPLUS
 CN 3H-Indolium, 1-[2-(dibutylamino)-2-oxoethyl]-2-[5-[1-[2-(dibutylamino)-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-, bromide (9CI) (CA INDEX NAME)

● Br⁻

RN 289037-16-7 CAPLUS
 CN 3H-Indolium, 2-[3-chloro-5-[1-[2-[[2-(2-chlorophenyl)amino]-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-1-[2-[[2-(2-chlorophenyl)amino]-2-oxoethyl]-3,3-dimethyl-, bromide (9CI) (CA INDEX NAME)

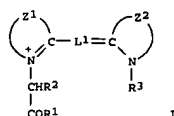
L15 ANSWER 10 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

● Br⁻

L15 ANSWER 11 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2000:551229 CAPLUS
 DOCUMENT NUMBER: 133:185448
 TITLE: Heat-developable high contrast photographic material suitable for printing platemaking
 INVENTOR(S): Kato, Kazunobu; Yabuki, Yoshiharu
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 48 pp.
 CODEN: JKKXAP
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000221631	A2	20000811	JP 1999-19941	19990128
PRIORITY APPLN. INFO.:			JP 1999-19941	19990128
OTHER SOURCE(S):		MARPAT 133:185448		

GI



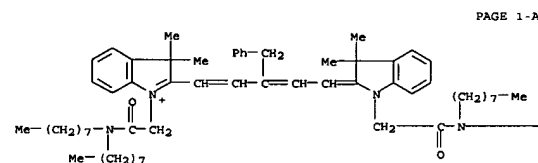
AB The title photog. material contains a cyanine dye represented by general formula I (R1 = H, aliph., arom., NR21R24, OR21, SR21; R21, R24 = H, aliph., arom.; R21 joining together with R24 may form ring; R2 = H, aliph., arom.; R3 = aliph.; L1 = methine; Z1, Z2 = atoms for forming 5-

to 6-membered ring) and base (precursor) in a photo-insensitive layer. The photog. material may contain a specified ultrahigh contrast agent. The photog. material shows ultrahigh contrast and low Dmin at visible region as well as 360 and 420 nm.

IT 222963-92-0 288104-88-1
 RL: DEV (Device component use); USES (Uses)
 (cyanine dye in heat-developable ultrahigh contrast photog. film)

RN 222963-92-0 CAPLUS
 CN 3H-indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[2-oxo-2-[(2,4,5-trichlorophenyl)amino]ethyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[2-oxo-2-[(2,4,5-trichlorophenyl)amino]ethyl]-, chloride (9CI) (CA INDEX NAME)

L15 ANSWER 11 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

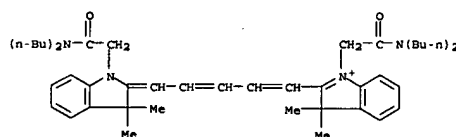


● Br⁻

PAGE 1-B

—(CH₂)₇—Me

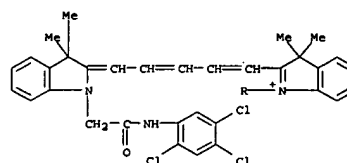
IT 222963-85-1P
 RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (cyanine dye in heat-developable ultrahigh contrast photog. film)
 RN 222963-85-1 CAPLUS
 CN 3H-indolium, 1-[2-(dibutylamino)-2-oxoethyl]-2-[5-[1-(2-(dibutylamino)-2-oxoethyl)-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-, iodide (9CI) (CA INDEX NAME)



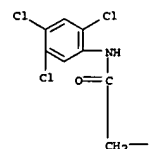
● I⁻

L15 ANSWER 11 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

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● Cl⁻

RN 288104-88-1 CAPLUS
 CN 3H-indolium, 1-[2-(diethylamino)-2-oxoethyl]-2-[5-[1-(2-(diethylamino)-2-oxoethyl)-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-3-(phenylmethyl)-1,3-pentadienyl]-3,3-dimethyl-, bromide (9CI) (CA INDEX NAME)

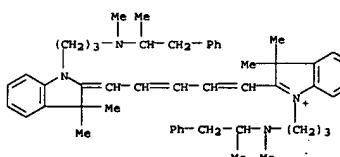
L15 ANSWER 12 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 2000:534426 CAPLUS
 DOCUMENT NUMBER: 133:187485
 TITLE: Portable and compact device for analysis of solutions
 INVENTOR(S): Kugimiya, Koichi; Miyazaki, Jinsei; Nakayama, Hiroshi
 PATENT ASSIGNEE(S): Matsushita Electric Industrial Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
 CODEN: JKKXAP
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000214095	A2	20000804	JP 1999-323353	19991112
PRIORITY APPLN. INFO.:			JP 1998-329898	A 19981119

AB The invention refers to a portable and compact fluorometer, suitable for detecting the concn. of solns. through chemiluminescence, comprising a storage compartment for the analyte, a reaction compartment where the analyte is introduced through capillary or lyophilic action, and a fluorescence detector.

IT 160391-08-2D, salts
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (portable and compact fluorometer for anal. of soln.)

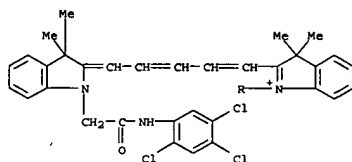
RN 160391-08-2 CAPLUS
 CN 3H-indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]- (9CI) (CA INDEX NAME)



L15 ANSWER 13 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1999:814649 CAPLUS
 DOCUMENT NUMBER: 132:57062
 TITLE: Heat-developable photosensitive material
 INVENTOR(S): Fujiwara, Itsuo; Totani, Ichizo; Noro, Masaki
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 44 pp.
 CODEN: JKXXAP
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11352626	A2	19991224	JP 1999-54473	19990302
US 6300053	B1	20011009	US 1999-283576	19990401
PRIORITY APPLN. INFO.:			JP 1998-95082	A 19980407

OTHER SOURCE(S): MARPAT 132:57062
 AB The title material, having .gtoreq.1 photosensitive layer on a support, possesses .gtoreq.1 nonphotosensitive layer contg. a dye (or its salt) which can be bleached by a base and a binder and .gtoreq.1 of the nonphotosensitive layer and its adjacent non-photosensitive layers contains a base precursor and a substance which depresses the m.p. by .gtoreq.3.degree. when mixed with the precursor. The material may possess a nonphotosensitive layer contg. a compd. R01S02R02 (R01, R02 = aliph., arom. or heterocyclic group, the compd. has no carboxyl group or its salt as substituent). The material shows improved dye decoloration upon heat development and water resistance.
 IT 222963-92-0
 RI: DEV (Device component use); USES (Uses)
 (heat-developable photosensitive material contg. agents lowering m.p. of base precursors to improve dye bleachability and water resistance)
 RN 222963-92-0 CAPLUS
 CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[2-oxo-2-[(2,4,5-trichlorophenyl)amino]ethyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[2-oxo-2-[(2,4,5-trichlorophenyl)amino]ethyl]-, chloride (9CI)
 (CA INDEX NAME)

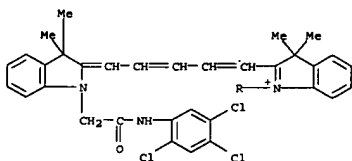


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L15 ANSWER 14 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1999:814648 CAPLUS
 DOCUMENT NUMBER: 132:57061
 TITLE: Heat-developable photosensitive material
 INVENTOR(S): Fujiwara, Itsuo; Totani, Ichizo
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 48 pp.
 CODEN: JKXXAP
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11352625	A2	19991224	JP 1999-54472	19990302
US 6165706	A	20001226	US 1999-287362	19990407
PRIORITY APPLN. INFO.:			JP 1998-95081	A 19980407

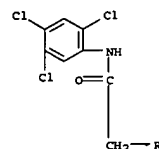
OTHER SOURCE(S): MARPAT 132:57061
 AB The title material, having .gtoreq.1 photosensitive layer on a support, possesses a nonphotosensitive layer contg. a base precursor, a dye (or its salt) which can be bleached by the base, and a binder on the support and the constitutive layer on the same side as the non-photosensitive layer contains .gtoreq.1 water-sol. polymer other than gelatin. The material shows high decoloring rate upon decoloration of the dye in heat development and the surface of the coating is uniform.
 IT 222963-92-0
 RI: DEV (Device component use); USES (Uses)
 (heat-developable photosensitive material contg. water-sol. polymers for high dye bleaching rate in heat development)
 RN 222963-92-0 CAPLUS
 CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[2-oxo-2-[(2,4,5-trichlorophenyl)amino]ethyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[2-oxo-2-[(2,4,5-trichlorophenyl)amino]ethyl]-, chloride (9CI)
 (CA INDEX NAME)



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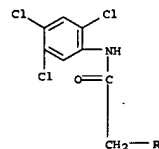
L15 ANSWER 13 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

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● Cl⁻

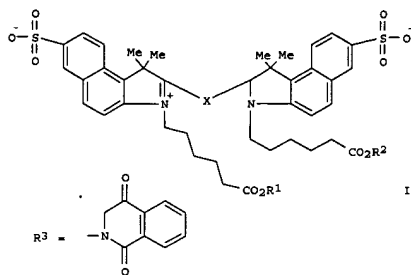
L15 ANSWER 14 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

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● Cl⁻

L15 ANSWER 15 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1999:794372 CAPLUS
 DOCUMENT NUMBER: 132:35989
 TITLE: Preparation of cyanine dye activating group with improved coupling selectivity to label chain terminators in nucleotide sequencing
 INVENTOR(S): Shen, Gene G.-Y.; Dobashi, Thomas S.
 PATENT ASSIGNEE(S): Beckman Instruments, Inc., USA
 SOURCE: U.S., 19 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

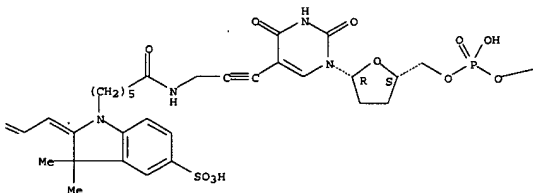
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6002003	A	19991214	US 1998-59900	19980414
PRIORITY APPLN. INFO.:			US 1998-59900	19980414
OTHER SOURCE(S):		MARPAT 132:35989		



AB Activating groups for cyanine dyes I (R1 = R2 = H; R1 = phthalimido; R2 = R3; X = CH:CHCH:CHCH:, CH:CHCH:CHCH:CHCH:) used to label chain terminators in nucleotide sequencing, based on N-hydroxyphthalimide, are disclosed. From these activating groups, activated dyes of the present invention are prepd. which react with the derivatized nucleotide chain terminators to give a labeled chain terminator of the present invention. The activating groups of the present invention allow the dye-chain terminator reaction to occur at a much higher yield and with much greater selectivity for the mono-substituted product, compared with the prior art.
 IT 252255-45-1P

L15 ANSWER 15 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

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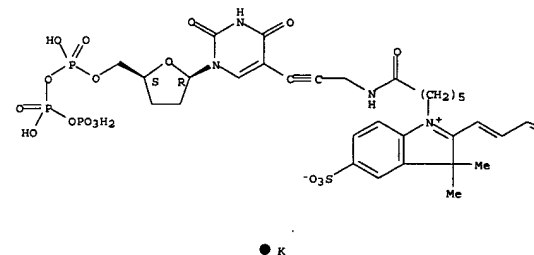
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REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
 FORMAT

L15 ANSWER 15 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. of cyanine dye activating group with improved coupling selectivity to label chain terminators in nucleotide sequencing)
 RN 252255-45-1 CAPLUS
 CN 3H-indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[6-oxo-6-[[3-[1,2,3,4-tetrahydro-2,4-dioxo-1-[(2R,5S)-tetrahydro-5-(3,5,7,7-tetrahydroxy-3,5,7-trioxido-2,4,6-trioxo-3,5,7-triphosphahept-1-yl)-2-furanyl]-5-pyrimidinyl]-2-propynylamino]hexyl]-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[6-oxo-6-[[3-[1,2,3,4-tetrahydro-2,4-dioxo-1-[(2R,5S)-tetrahydro-5-(3,5,7,7-tetrahydroxy-3,5,7-trioxido-2,4,6-trioxo-3,5,7-triphosphahept-1-yl)-2-furanyl]-5-pyrimidinyl]-2-propynylamino]hexyl]-5-sulfo-, inner salt, monopotassium hexasodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.

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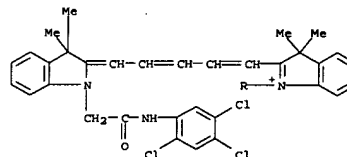


L15 ANSWER 16 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1999:783298 CAPLUS
 DOCUMENT NUMBER: 132:42763
 TITLE: Heat-developable photographic material and method for processing thereof
 INVENTOR(S): Fujiwara, Itsuo; Totani, Ichizo
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 48 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 1138097	A2	19991210	JP 1998-156619	19980521
PRIORITY APPLN. INFO.:			JP 1998-156619	19980521

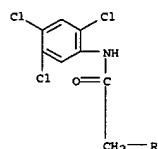
AB The heat-developable photog. material has a light-sensitive layer and a light-insensitive layer on a support and a light-insensitive layer on the other side of the support, wherein a layer contg. gelatin is disposed on the support and wherein a layer forming material weighing .gtoreq.3% based on the total layer forming materials has a 60-200 .degree.C m.p. The heat-developable photog. material shows the excellent scratch resistance and the prevented uneven development.
 IT 222963-92-0
 RL: TEM (Technical or engineered material use); USES (Uses) (heat-developable photog. material and method for processing thereof)
 RN 222963-92-0 CAPLUS
 CN 3H-indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[2-oxo-2-[(2,4,5-trichlorophenyl)amino]ethyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[2-oxo-2-[(2,4,5-trichlorophenyl)amino]ethyl]-, chloride (9CI) (CA INDEX NAME)

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L15 ANSWER 16 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

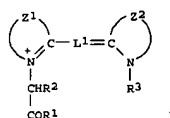
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● Cl⁻

L15 ANSWER 17 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:279801 CAPLUS
 DOCUMENT NUMBER: 130:303973
 TITLE: Heat-developable photographic material containing cyanine dye
 INVENTOR(S): Sakurada, Masami; Noro, Masaki; Fujiwara, Itsuo; Yabuki, Yoshiharu
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Eur. Pat. Appl., 44 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 911693	A1	19990428	EP 1998-119943	19981021
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 11231457	A2	19990827	JP 1998-315454	19981019
US 2001001704	A1	20010524	US 1998-175952	19981021
US 2002025488	A1	20020228	US 2001-931864	20010820
US 6465163	B2	20021015		
PRIORITY APPLN. INFO.:			JP 1997-306403	A 19971021
			US 1998-175952	A3 19981021
OTHER SOURCE(S):			MARPAT 130:303973	
GI				



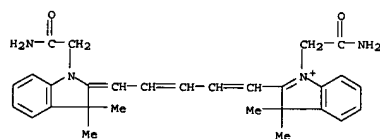
AB A heat-developable photog. material comprises a support, a photosensitive layer, and a nonphotosensitive layer. The photosensitive layer contains silver halide and a reducing agent. The nonphotosensitive layer contains a cyanine dye represented by the formula I (R1 = H, an aliph. group, an arom. group, NR4R5, OR4, or SR5 where R4, R5 = H, an aliph. group, or an arom. group or R4 and R5 may be combined to form a nitrogen-contg. heterocyclic ring; R2 = H, an aliph. group, or an arom. group; R3 = an aliph. group; Li = a methine chain consisting of an odd no. of methine groups; and Z1, Z2 = an at. group capable of forming a five- or six-membered nitrogen-contg. heterocyclic ring) or a salt thereof and a base precursor.

IT 222963-86-2P 222963-88-4P 222963-92-0P
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (heat-developable photog. materials contg.)

RN 222963-86-2 CAPLUS

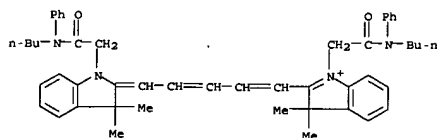
L15 ANSWER 17 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

CN 3H-Indolium, 1-[2-amino-2-oxoethyl]-2-[5-[1-(2-amino-2-oxoethyl)-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

RN 222963-88-4 CAPLUS

CN 3H-Indolium, 1-[2-(butylphenylamino)-2-oxoethyl]-2-[5-[1-(2-(butylphenylamino)-2-oxoethyl)-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

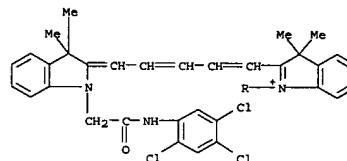
● Cl⁻

RN 222963-92-0 CAPLUS

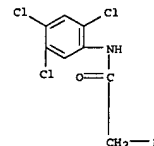
CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[2-oxo-2-[(2,4,5-trichlorophenyl)amino]ethyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[2-oxo-2-[(2,4,5-trichlorophenyl)amino]ethyl]-, chloride (9CI) (CA INDEX NAME)

L15 ANSWER 17 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

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● Cl⁻

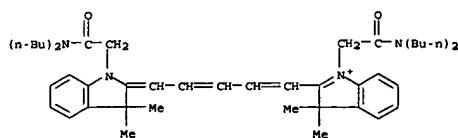
IT 222963-85-1P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (prepn. and use in heat-developable photog. materials)

RN 222963-85-1 CAPLUS

CN 3H-Indolium, 1-[2-(dibutylamino)-2-oxoethyl]-2-[5-[1-[2-(dibutylamino)-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-, iodide (9CI) (CA INDEX NAME)

L15 ANSWER 17 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

● I⁻

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L15 ANSWER 18 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:96315 CAPLUS
 DOCUMENT NUMBER: 130:140501
 TITLE: Multiply charged cyanine dyes
 INVENTOR(S): Cummins, William Jonathan; West, Richard Martin; Smith, John Anthony
 PATENT ASSIGNEE(S): Nycomed Amersham Plc, UK
 SOURCE: PCT Int. Appl., 42 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9905221	A1	19990204	WO 1998-GB2232	19980727
W: AU, CA, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9886351	A1	19990216	AU 1998-86351	19980727
AU 740661	B2	20011108		
EP 1017947	A1	20000927	EP 1998-937620	19980727
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001510873	T2	20010807	JP 2000-504202	19980727
US 6348599	B1	20020219	US 2000-463534	20000424
PRIORITY APPLN. INFO.:			EP 1997-305550	A 19970728
			WO 1998-GB2232	W 19980727

OTHER SOURCE(S): MARPAT 130:140501

AB A tri-, penta-, or heptamethine cyanine dye has .gtoreq.3 pos. charged N or P or S atoms, and also preferably has a reactive or functional group

by

which it may be linked to a biomol. or a solid surface. The dyes are suitable for forming conjugates with carbohydrates. Thus, Br(CH₂)₃Br was quaternized at one end with Et₃N and at the other end with 2,3,3-trimethylindolenine, and the product was condensed with 2-(2-anilinovinyl)-1-(5-carboxypentyl)-3,3-dimethylindolium bromide to give a carbocyanine with charge 2+, the CO₂H group of which was amidated with H₂N(CH₂)₃NMe₂(CH₂)₃NHCO₂Me₃ to increase the charge to 3+. The product had .lambda._{max} 548 nm (MeOH) and could be deprotected by use of CF₃CO₂H in MeOH-CHCl₃.

IT 220143-74-8P 220143-84-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of multiply charged cyanine dyes)

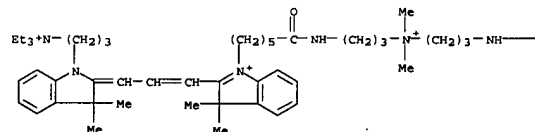
RN 220143-74-8 CAPLUS

CN 3H-Indolium,

2-[3-[1,3-dihydro-3,3-dimethyl-1-[3-(triethylammonio)propyl]-2H-indol-2-ylidene]-1-propenyl]-3,3-dimethyl-1-(11,11,15,15,22,22-hexamethyl-6,20-dioxo-21-oxa-7,19-diaza-11,15-diazoniatricos-1-yl)-, tetrabromide (9CI) (CA INDEX NAME)

L15 ANSWER 18 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

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● 3 Br⁻

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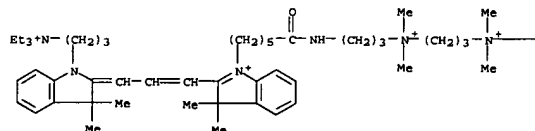


RN 220143-84-0 CAPLUS

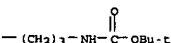
CN 3H-Indolium,

2-[3-[1,3-dihydro-3,3-dimethyl-1-[3-(triethylammonio)propyl]-2H-indol-2-ylidene]-1-propenyl]-3,3-dimethyl-1-(11,11,15,15,22,22-hexamethyl-6,20-dioxo-21-oxa-7,19-diaza-11,15-diazoniatricos-1-yl)-, tetrabromide (9CI) (CA INDEX NAME)

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● 4 Br⁻

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REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L15 ANSWER 19 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)
(Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(fluorescent labeling and electrophoresis of carbohydrates)
RN 205814-77-3 CAPLUS
CN 3H-Indolium.
2-[3-{1-[(3-aminopropyl)amino]-6-oxohexyl}-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1-propenyl-3,3-dimethyl-1-[3-(triethylammonio)propyl]- (9CI). [CA INDEX NAME]

$$\text{Et}_3\text{N}^+-(\text{CH}_2)_3-\text{N}^+=\text{C}(\text{Me})-\text{CH}=\text{CH}-\text{C}(\text{Me})=\text{N}-(\text{CH}_2)_5-\text{C}(=\text{O})-\text{NH}-(\text{CH}_2)_3-\text{NH}_2$$

RN 205814-78-4 CAPLUS
CN 3H-Indolium, 2-[3-[1-(3-aminopropyl)-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1-propenyl]-3,3-dimethyl-1-[3-(triethylammonio)propyl]- (9CI)
(CA INDEX NAME)

CC(C)(C)N[+]([CH-](c1ccccc1)C(C)=C)C(C)=C/C=C/C(C)=C/N([CH2]3)C4=CC=CC=C4

RN 205814-89-7 CAPLUS
CN 3H-Indolium, 2-[3-[1-[[3-[[3-aminopropyl]dimethylammonio]propyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1-propenyl]-3,3-dimethyl-1-[3-(trimethylammonio)propyl]- (9CI) (CA INDEX NAME)

CN(C)CC[N+]1=C(C)c2ccccc12.CN(C)CC[N+]1=C(C)c2ccccc12

RN 205815-03-8 CAPLUS
CN 3H-Indolium, 2-[3-{1-[3-{{3-aminopropyl}dimethylammonio}propyl]-1,3-

L15 ANSWER 19 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

The chemical structure shows a polymer chain with two repeating units. The first unit is a 1,2,3,4,5-pentamethyl-1,2,3,4-cyclopentadienyl cation, where the five methyl groups are at positions 1, 2, 3, 4, and 5, and the positive charge is on the nitrogen atom. The second unit is a 2,2,6,6-tetramethyl-1,2,3,4,5-pentaphenyl cation, where the four methyl groups are at positions 2, 2, 6, and 6, and the positive charge is on the nitrogen atom. The two units are linked by a methylene chain: $(\text{CH}_2)_3\text{-N}^+(\text{Me})_2$. The polymer is terminated with a phenyl group and a trimethylammonium group.

IT 205814-94-4P 205815-00-5P
RL: ARG (Analytical reagent use); ARU (Analytical role, unclassified);
BUU

(fluorescent labeling and electrophoresis of carbohydrates)

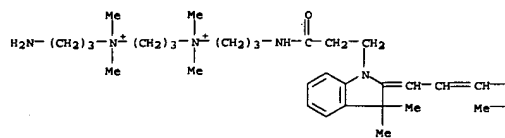
CN 205814-94-4 CAPLOS
 CN 3H-Indolium,
 2-[3-{1-[3-{3-[(3-aminopropyl)dimethylammonio]propyl}amino]-
 3-oxopropyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)-1-propenyl]-3,3-
 dimethyl-1-[3-(triethylammonio)propyl]-9CI (CA INDEX NAME)

$$\text{Et}_3\text{N}^+ - (\text{CH}_2)_3 - \text{N}^+ \text{ (indene ring with Me)} = \text{CH} - \text{CH} = \text{CH} - \text{N}^+ \text{ (indene ring with Me)} - \text{CH}_2 - \text{CH}_2 - \text{C}(=\text{O}) - \text{NH} - (\text{CH}_2)_3 - \text{N}^+ \text{ (Me)}_2 - (\text{CH}_2)_3 - \text{NH}_2$$

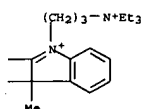
RN 205815-00-5 CAPLUS
CN 3H-Indolium,
2-[3-{1-[3-{1-[3-{(3-aminopropyl)dimethylammonio}propyl)dimethylammonio}propyl]amino}-3-oxopropyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1-propenyl]-3,3-dimethyl-1-[3-(triethylammonio)propyl]- (9CI)
(CA INDEX NAME)

L15 ANSWER 19 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-A



PAGE 1-B



IT 205815-18-5P

RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); NUU (Other use, unclassified); SPN (Synthetic preparation);
ANST (Analytical study); BIOL (Biological study); PREP (Preparation);

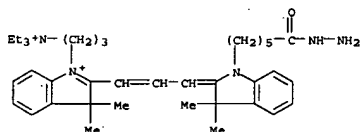
USES
(Uses)

(fluorescent labeling and electrophoresis of carbohydrates)

RN 205815-18-5 CAPLUS

CN 3H-Indolium,

2-[3-[1-(6-hydrazino-6-oxohexyl)-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1-propenyl]-3,3-dimethyl-1-[3-(triethylammonio)propyl]- (9CI) (CA INDEX NAME)



IT 205815-17-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

L15 ANSWER 20 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997.752781 CAPLUS

DOCUMENT NUMBER: 128.14131

TITLE: Intermediates and method for synthesizing fluorescent sulfoindocyanine dyes

INVENTOR(S): Bobrow, Mark Norman; Erickson, Thomas Joseph

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours and Co., USA

SOURCE: U.S., 6 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5688966	A	19971118	US 1996-687853	19960726
US 5767287	A	19980616	US 1997-869032	19970604
WO 9804635	A1	19980205	WO 1997-US12797	19970721

W: JP

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,

SE

EP 882097 A1 19981209 EP 1997-938012 19970721

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, FI

JP 2000503707 T2 20000328 JP 1998-508925 19970721

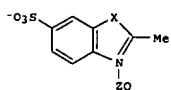
PRIORITY APPLN. INFO.: US 1996-687853 19960726

WO 1997-US12797 19970721

OTHER SOURCE(S):

MARPAT 128.14131

GI



I

AB Intermediates I (Q = enzyme substrate, member of a specific binding pair, phenolic group; X = O, S, CMe2; Z = divalent group) are useful in the synthesis of fluorescent sulfoindocyanine dyes. Dyes synthesized using such intermediates do not contain a reactive group that will covalently attach to a target mol. at an amine- or hydroxy-contg. site.

IT 199175-67-2P 199175-68-3P 199175-72-9P

RL: IMP (Industrial manufacture); PREP (Preparation)

(prepn. of fluorescent sulfoindocyanine dyes)

RN 199175-67-2 CAPLUS

CN 3H-Indolium, 2-[3-[1,3-dihydro-1-[6-[[2-(4-hydroxyphenyl)ethyl]amino]-6-

oxohexyl]-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1-propenyl]-1-[6-[[2-(4-hydroxyphenyl)ethyl]amino]-6-oxohexyl]-3,3-dimethyl-5-sulfo-, inner salt, monopotassium salt (9CI) (CA INDEX NAME)

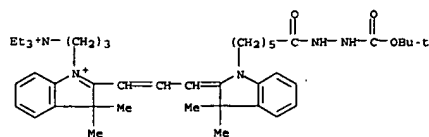
L15 ANSWER 19 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

(Reactant or reagent)

(fluorescent labeling and electrophoresis of carbohydrates)

RN 205815-17-4 CAPLUS

CN 3H-Indolium, 2-[3-[1-[6-[[2-[[1,1-dimethylethoxy]carbonyl]hydrazino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1-propenyl]-3,3-dimethyl-1-[3-(triethylammonio)propyl]- (9CI) (CA INDEX NAME)



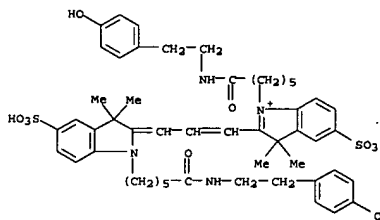
REFERENCE COUNT:

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THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L15 ANSWER 20 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

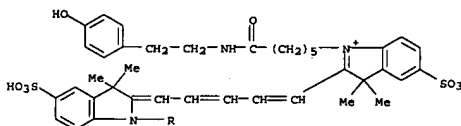


● K

RN 199175-68-3 CAPLUS

CN 3H-Indolium, 2-[5-[1,3-dihydro-1-[6-[[2-(4-hydroxyphenyl)ethyl]amino]-6-oxohexyl]-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-[6-[[2-(4-hydroxyphenyl)ethyl]amino]-6-oxohexyl]-3,3-dimethyl-5-sulfo-,

inner salt, monopotassium salt (9CI) (CA INDEX NAME)

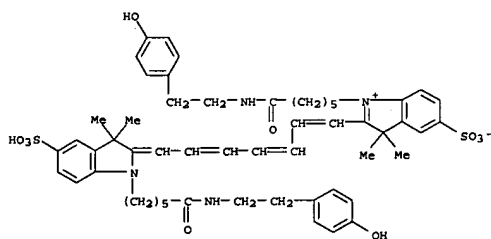


● K

RN 199175-72-9 CAPLUS

CN 3H-Indolium, 2-[7-[1,3-dihydro-1-[6-[[2-(4-hydroxyphenyl)ethyl]amino]-6-oxohexyl]-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-1-[6-[[2-(4-hydroxyphenyl)ethyl]amino]-6-oxohexyl]-3,3-dimethyl-5-sulfo-, inner salt, monopotassium salt (9CI) (CA INDEX NAME)

L15 ANSWER 20 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

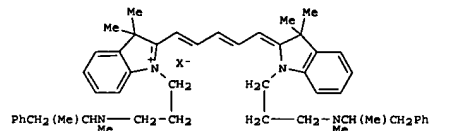


● K

L15 ANSWER 21 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:69231 CAPLUS
 DOCUMENT NUMBER: 127:356133
 TITLE: Competitive fluorescence immunoassay of methamphetamine, etc. using measuring cell filled with fluorescent dye solution just before measurement
 INVENTOR(S): Hirai, Masato; Miyazaki, Kimimasa
 PATENT ASSIGNEE(S): Matsushita Electric Industrial Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKKXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09273993	A2	19971021	JP 1996-81264	19960403
PRIORITY APPLN. INFO.: GI			JP 1996-81264	19960403



AB In the immunoassay of an analyte using a fluorescent dye having antigenic determinants similar to those of the analyte and the antibody to them,

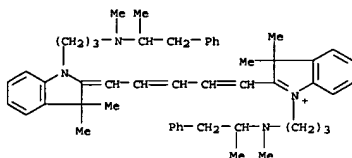
(1) a soln. of a fluorescent dye stored in a measuring cell after the previous measurement is drawn from the cell, (2) a sample is eluted with another soln. of the fluorescent dye and the eluate is injected to the cell for measuring fluorescence intensity, (3) a soln. of the antibody is added to the cell followed by stirring and measuring fluorescence intensity, (4) the sample soln. after measurement is drawn from the cell, and (5) a soln.

of the fluorescent dye is injected into the cell to prevent drying of the cell and confirm reproducibility of the measurement. A fluorescent dye I (X = Cl, Br, I, MeCO2H, ClO4) is used and fluorescence intensity is measured using 600-nm exciting light when the analyte is methamphetamine. The method is also applied to detn. of pharmaceuticals, agrochemicals, and other substances with forensic significance.

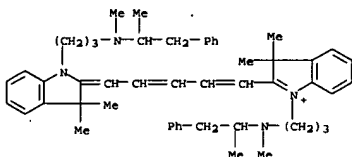
IT 160391-05-9 160391-06-0 160391-07-1
 160391-09-3 160391-10-6
 RI: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)

L15 ANSWER 21 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

(fluorescence immunoassay for methamphetamine)
 RN 160391-05-9 CAPLUS
 CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-, chloride (9CI) (CA INDEX NAME)

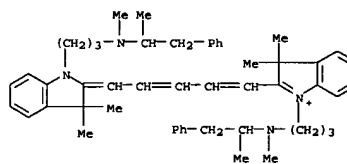
● Cl⁻

RN 160391-06-0 CAPLUS
 CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-, bromide (9CI) (CA INDEX NAME)

● Br⁻

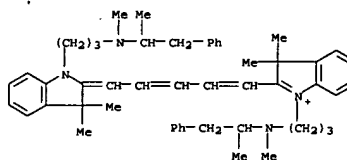
RN 160391-07-1 CAPLUS
 CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-, iodide (9CI) (CA INDEX NAME)

L15 ANSWER 21 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

● I⁻

RN 160391-09-3 CAPLUS
 CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-, acetate (9CI) (CA INDEX NAME)

CN 1
 CRN 160391-08-2
 CMP C51 H65 N4



CN 2
 CRN 71-50-1
 CMP C2 H3 O2



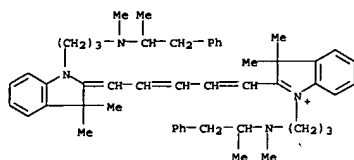
RN 160391-10-6 CAPLUS
 CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-

L15 ANSWER 21 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)
dimethyl-1-[3-[(methyl(1-methyl-2-phenylethyl)amino)propyl]-, perchlorate
(9CI) (CA INDEX NAME)

CM 1

CRN 160391-08-2

CMF C51 H65 N4



CM 2

CRN 14797-73-0

CMF C1 O4



L15 ANSWER 22 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:602513 CAPLUS

DOCUMENT NUMBER: 127:301211

TITLE: Silver halide photographic material with high sensitivity, its development, and polymethine dye

INVENTOR(S): Onishi, Akira; Sudo, Susumu

PATENT ASSIGNEE(S): Konica Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 38 pp.

CODEN: JKOXAF

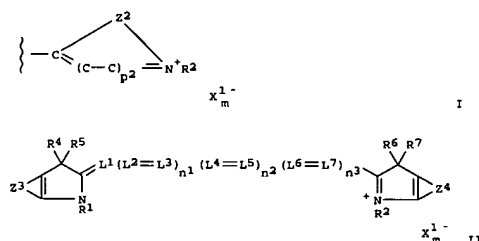
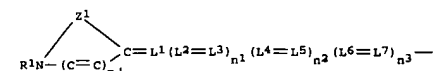
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09230539	A2	19970905	JP 1996-38092	19960226
PRIORITY APPL. INFO.: GI			JP 1996-38092	19960226



AB The silver halide photog. material has .gtoreq.1 hydrophilic colloid layer

contg. a dye I (R1-2 = alkyl; Z1-2 = nonmetal atoms required to form N-contg. heterocycle; L1-7 = methine; .gtoreq.1 L1-7 = COR3; R3 = alkyl, aryl, amino, heterocycle; L3 and L5 may form ring; X1- = anion; p1, p2,

m, n1-3 = 0, 1; n1, n2 and n3 are not 0 at the same time). The above material is developed for total processing time .ltoreq.90 s. The dye II (R4-7 = H, alkyl, aryl, R4 and R6 may form ring with R5 and R7, resp.) is also claimed. The material shows high sensitivity and gives images with

L15 ANSWER 23 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

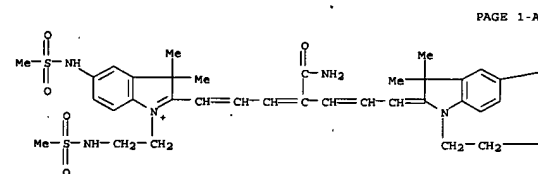
high contrast and low fog.

IT 196958-58-4

RL: DEV (Device component use); USES (Uses)
(silver halide photog. material contg. polymethine dye and its rapid development)

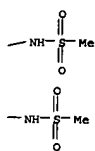
RN 196958-58-4 CAPLUS

CN 3H-indolium, 2-[4-(aminocarbonyl)-7-[1,3-dihydro-3,3-dimethyl-5-[(methylsulfonyl)amino]-1-[2-[(methylsulfonyl)amino]ethyl]-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-5-[(methylsulfonyl)amino]-1-[2-[(methylsulfonyl)amino]ethyl]-, bromide (9CI) (CA INDEX NAME)



PAGE 1-A

● Br-



PAGE 1-B

L15 ANSWER 23 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:496774 CAPLUS

DOCUMENT NUMBER: 127:115221

TITLE: A novel class of non-sensitizing infra-red dyes for use in photosensitive elements

INVENTOR(S): Kiekens, Eric

PATENT ASSIGNEE(S): Agfa-Gevaert Naamloze Vennootschap, Belg.

SOURCE: Eur. Pat. Appl., 24 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 779540	A1	19970618	EP 1996-203355	19961128
R: BE, DE, FR, GB				
US 5741632	A	19980421	US 1996-762442	19961209
JP 09179236	A2	19970711	JP 1996-351785	19961212
US 5936086	A	19990810	US 1998-20690	19980210
PRIORITY APPL. INFO.:			EP 1995-203492	19951214
			US 1996-762442	19961209

OTHER SOURCE(S): MARPAT 127:115221

AB A novel class of non-sensitizing infra-red dyes derived from heptamethine dyes with indolenine nuclei is disclosed. They are useful as filter, acetone, or antihalation dyes for photog. elements based on silver

halide or for photothermog. elements.

IT 192220-83-0

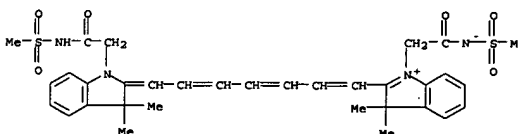
RL: TEM (Technical or engineered material use); USES (Uses)

(non-sensitizing IR dye for photog. and photothermog. materials)

RN 192220-83-0 CAPLUS

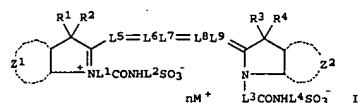
CN 3H-indolium,

2-[7-[1,3-dihydro-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-, inner salt (9CI) (CA INDEX NAME)



L15 ANSWER 24 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1997:383560 CAPLUS
 DOCUMENT NUMBER: 127:25865
 TITLE: Photographic light-absorbing cyanine dye
 INVENTOR(S): Sumioka, Koichi; Tanaka, Akira
 PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAP
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09090562	A2	19970404	JP 1995-242584	19950921
PRIORITY APPLN. INFO.:			JP 1995-242584	19950921
OTHER SOURCE(S):		MARPAT 127:25865		



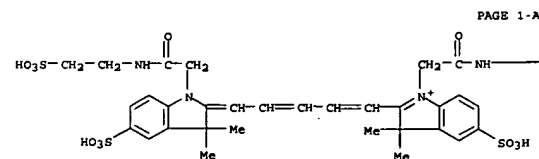
AB The dye comprises I (R1-4 = alkyl; Z1, Z2 = at. group to form a benzene ring or a naphthalene ring; L1-4 = divalent linkage group; L5-9 = methine;

M+ = cation; n = 1-5). The dye showed high light absorbance and gave photog. images without color remaining.

IT 190078-09-2 CAPLUS
 RL: DEV (Device component use); IMP (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (photog. light-absorbing cyanine dye)

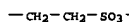
RN 190078-09-2 CAPLUS
 CN 3H-Indolium, 2-[5-[(1,3-dihydro-3,3-dimethyl-1-[2-oxo-2-[(2-sulfoethyl)amino]ethyl]-5-sulfo-2H-indol-2-ylidene)-1,3-pentadienyl]-3,3-dimethyl-1-[2-oxo-2-[(2-sulfoethyl)amino]ethyl]-5-sulfo-, inner salt, tripotassium salt (9CI) (CA INDEX NAME)

L15 ANSWER 24 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

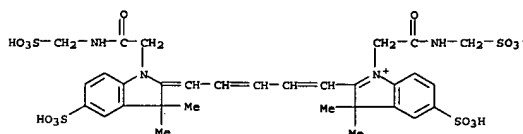


● 3 K

PAGE 1-B



IT 190078-10-5
 RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses) (photog. light-absorbing cyanine dye)
 RN 190078-10-5 CAPLUS
 CN 3H-Indolium, 2-[5-[(1,3-dihydro-3,3-dimethyl-1-[2-oxo-2-[(sulfomethyl)amino]ethyl]-5-sulfo-2H-indol-2-ylidene)-1,3-pentadienyl]-3,3-dimethyl-1-[2-oxo-2-[(sulfomethyl)amino]ethyl]-5-sulfo-, inner salt, tripotassium salt (9CI) (CA INDEX NAME)



● 3 K

L15 ANSWER 25 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1997:85099 CAPLUS
 DOCUMENT NUMBER: 126:86792
 TITLE: Fluorescent labeling complexes with large Stokes shifts formed by coupling together cyanine and other fluorochromes capable of resonance energy transfer
 INVENTOR(S): Waggoner, Alan Stewart; Mujumdar, Swati Ratnakar; Mujumdar, Ratnakar Balwant
 PATENT ASSIGNEE(S): Carnegie-Mellon University, USA
 SOURCE: Eur. Pat. Appl., 29 pp.
 CODEN: EPXKDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 747700	A2	19961211	EP 1996-303879	19960530
EP 747700	A3	19970507		
EP 747700	B1	20011205		
R: AT, BE, CH, DE, ES, FI, FR, GB, IT, LI, NL, SE				
US 6008373	A	19991228	US 1995-476880	19950607
GB 2301833	A1	19961218	GB 1996-11453	19960530
GB 2301833	B2	19970716		
EP 943918	A1	19990922	EP 1999-110086	19960530
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE, FI				
AT 210292	E	20011215	AT 1996-303879	19960530
ES 2170204	T3	20020801	ES 1996-303879	19960530
CA 2178308	AA	19961208	CA 1996-2178308	19960605
JP 09104825	A2	19970422	JP 1996-146333	19960607
JP 2843296	B2	19990106		
US 6130094	A	20001010	US 1998-152009	19980911
US 6479303	B1	20021112	US 1998-151899	19980911
US 6545164	B1	20030408	US 1999-413998	19991007
PRIORITY APPLN. INFO.:			US 1995-476880	A 19950607
			EP 1996-303879	A3 19960530

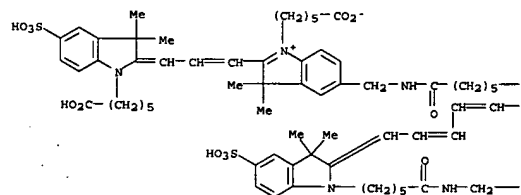
AB The present invention provides low-mol.-wt. fluorescent labeling complexes with large wavelength shifts between absorption of one dye in the complex and emission from another dye in the complex. These complexes can be used, for example, for multiparameter fluorescence cell anal. using a single excitation wavelength. The low mol. wt. of the complex permits materials labeled with the complex to penetrate cell structures for use as probes. The labeling complexes are synthesized by covalently attaching through linkers to form donor-acceptor complexes. Resonance energy transfer from an excited donor to fluorescent acceptor provides wavelength shifts up to 300 nm. The fluorescent labeling complexes preferably contain reactive groups for the labeling of functional groups on target compounds, such as derivatized oxy and deoxy polynucleic acids, antibodies, enzymes, lipids, carbohydrates, proteins, and other materials. The complexes may contain functional groups permitting covalent reaction with materials contg. reactive groups.

IT 185397-51-79
 RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses) (fluorescent labeling complexes with large Stokes shifts prepn. for cell anal.)

RN 185397-51-7 CAPLUS

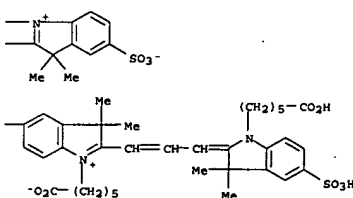
L15 ANSWER 25 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

CN 3H-Indolium, 1-[6-[[[1-(5-carboxypentyl)-2-[3-[1-(5-carboxypentyl)-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1-propenyl]-3,3-dimethyl-3H-indolium-5-yl)methyl]amino]-6-oxohexyl]-2-[5-[1-[6-[[[1-(5-carboxypentyl)-2-[3-[1-(5-carboxypentyl)-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1-propenyl]-3,3-dimethyl-3H-indolium-5-yl)methyl]amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-5-sulfo-, tris(inner salt) (9CI) (CA INDEX NAME)



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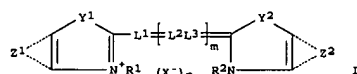
PAGE 1-B



L15 ANSWER 26 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1996:543588 CAPLUS
 DOCUMENT NUMBER: 125:161278
 TITLE: Electrophotographic photoreceptor containing sensitizing dye
 INVENTOR(S): Maruyama, Atsushi; Matsubayashi, Tatsuhiro
 PATENT ASSIGNEE(S): Mitsubishi Paper Mills Ltd, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAP
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08152729	A2	19960611	JP 1994-293282	19941128
PRIORITY APPLN. INFO.:			JP 1994-293282	19941128

GI



AB The photoreceptor contains a photoconductive Zn oxide, a binder, a sensitizing dye I (R1-2 = TSO2NR3R4, QNRSSO2R6; Y1-2 = nonmetal atoms to form thiazole, oxazole, imidazol, selenazole, or indolenine ring; Z1-2 = atoms to form benzene or naphthalene ring; L1-3 = methine; m = 2, 3; X = anion; T, Q =divalent linkage bonding to N; R3-5 = alkyl, alkenyl, aryl alkyl, H; R6 = alkyl, alkenyl, aryl alkyl), and an optional sensitizing aid. The photoreceptor shows high sensitivity toward red light and IR ray, good dark decay retention, and storage stability.

IT 180613-70-1P
 RL: DEV (Device component use); MOA (Modifier or additive use); PRU (Preparation, unclassified); PREP (Preparation); USES (Uses) (electrophotog. photoreceptor contg. zinc oxide and cyanine dye as sensitizer)

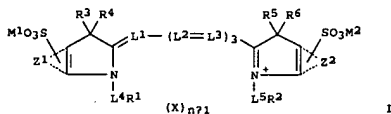
RN 180613-70-1 CAPLUS
 CN 3H-Indolium, 2-[7-[1,3-dihydro-3,3-dimethyl-1-[2-

[(methylsulfonyl)amino]ethyl]-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]ethyl]-, bromide (9CI) (CA INDEX NAME)

L15 ANSWER 27 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1996:543588 CAPLUS
 DOCUMENT NUMBER: 124:274366
 TITLE: Silver halide photographic material containing dye with lens residual color
 INVENTOR(S): Harada, Tooru; Araki, Naoki
 PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
 CODEN: JKXXAP
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07333784	A2	19951222	JP 1994-122666	19940603
PRIORITY APPLN. INFO.:			JP 1994-122666	19940603

GI



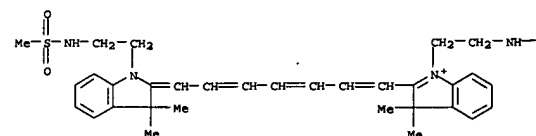
AB The material has a hydrophilic colloidal layer contg. .gtoreq.1 dye I [Z1-2 = nonmetal atoms to form benzo or naphtho condensed ring; L4-5 = C1-4 alkylene, R1-2 = CONHA, SO2NHA; A = COR7, SO2R7; R7 = alkyl; R3-6 = alkyl; R3 and R4 or R5 and R6 may form a ring; L1-3 = methine (which may link to form 5- or 6-membered ring); M1-2 = alkali metal salt, ammonium salt, neg. charge; X = anion; n = 1-2, when inner salt is formed, n = 1]. The material shows good storage stability and less residual color after processing.

IT 175220-19-6
 RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses) (photog. film contg. dye in surface protective layer)

RN 175220-19-6 CAPLUS
 CN 3H-Indolium, 2-[7-[1,3-dihydro-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-sulfo-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-1-[2-[(methylsulfonyl)amino]-2-oxoethyl]-5-sulfo-, inner salt, monopotassium salt (9CI) (CA INDEX NAME)

L15 ANSWER 26 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

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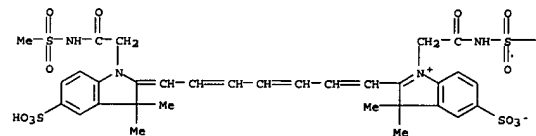
• Br-

PAGE 1-B



L15 ANSWER 27 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued).

PAGE 1-A



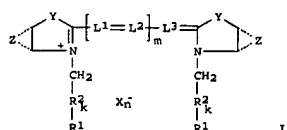
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PAGE 1-B

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L15 ANSWER 28 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1995:993224 CAPLUS
 DOCUMENT NUMBER: 124:160304
 TITLE: Electrophotographic photoreceptor with high sensitivity for semiconductor laser light
 INVENTOR(S): Matsubayashi, Tatsuhiro; Yamamoto, Hirokazu
 PATENT ASSIGNEE(S): Mitsubishi Paper Mills Ltd, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAP
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07271075	A2	19951020	JP 1994-57633	19940328
PRIORITY APPLN. INFO.: GI			JP 1994-57633	19940328

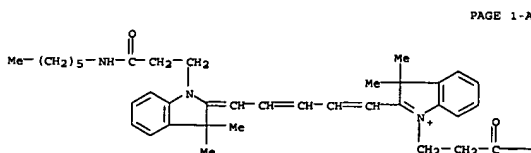


AB The photoreceptor has a photoconductor layer contg. photoconductive ZnO, a binder resin, a sensitizing aid, and a cyanine sensitizing dye I [R1 = .Gtoreq.1 phenolic OH-contg. aryl; R2 = divalent group; k = 0, 1; Y = nonmetal at. group forming thiazole, oxazole, imidazole, selenazole, or indolenine; Li-3 = (substituted) methine; m = 2, 3; X = anion]. The photoreceptor shows high sensitivity and good storage stability.
 IT 173195-13-6P
 RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
 (electrophotog. photoreceptor contg. zinc oxide photoconductor and cyanine sensitizing dye with high sensitivity for semiconductor laser light)
 RN 173195-13-6 CAPLUS
 CN 3H-Indolium,
 1-[2-[(5-chloro-2-hydroxyphenyl)amino]-2-oxoethyl]-2-[7-[1-[2-[(5-chloro-2-hydroxyphenyl)amino]-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-, bromide (9CI) (CA INDEX NAME)

L15 ANSWER 29 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1995:954588 CAPLUS
 DOCUMENT NUMBER: 123:344716
 TITLE: Use of infrared absorbing and fluorescent substances as flaw detection agents
 INVENTOR(S): Neumann, Peter; Kipper, Juergen; Albert, Bernhard; Wagenblast, Gerhard
 PATENT ASSIGNEE(S): BASF A.-G., Germany
 SOURCE: Eur. Pat. Appl., 13 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

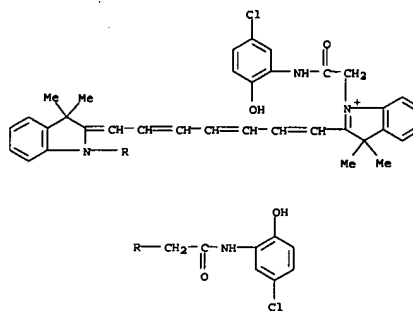
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 666474	A1	19950809	EP 1995-101126	19950127
EP 666474	B1	19990331		
R: BE, CH, DE, FR, GB, IT, LI, NL				
DE 4403664	A1	19950810	DE 1994-4403664	19940207
US 5554318	A	19960910	US 1995-379283	19950127
JP 07243991	A2	19950919	JP 1995-17344	19950203
PRIORITY APPLN. INFO.: OTHER SOURCE(S):			DE 1994-4403664	19940207
			MARPAT 123:344716	

AB Substances of the following classes are used: phthalocyanines, naphthalocyanines, aminium compds. of arom. amines, methine dyes, or azulene squaric acid dyes. Their absorption max. and fluorescence max. are in the 600-1200 and 620-1200 nm ranges, resp. They can be used for flaw detection in metals, ceramics and plastics.
 IT 153249-59-3
 RL: NUU (Other use, unclassified); USES (Uses)
 (use of IR absorbing and fluorescent substances as flaw detection agents)
 RN 153249-59-3 CAPLUS
 CN 3H-Indolium, 1-[3-(hexylamino)-3-oxopropyl]-2-[5-[1-[3-(hexylamino)-3-oxopropyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-, perchlorate (9CI) (CA INDEX NAME)
 CM 1
 CRN 153249-58-2
 CMF C43 H61 N4 O2



L15 ANSWER 28 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

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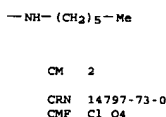


PAGE 2-A

Br⁻

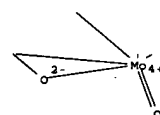
L15 ANSWER 29 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-B



L15 ANSWER 31 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 2-A



PAGE 3-A

The diagram shows a cross-section of a metal-oxide-metal structure. On the left, a molybdenum ion (Mo^{4+}) is bonded to four oxygen atoms. One oxygen atom is double-bonded to the Mo^{4+} ion. On the right, another molybdenum ion (Mo^{4+}) is shown, with a single bond connecting it to the oxygen atom of the double bond on the left. This oxygen atom is labeled with a '2' and a minus sign (O^{2-}).

L15 ANSWER 32 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-A

CCCCCNC(=O)CC1=C(C)C=C(C2=CC=CC=C2N1C)C=CC=CC=C(C3=CC=CC=C3N=C4C(C)C=C(C5=CC=CC=C5N4C(=O)CC)C6=CC=CC=C6)C3

PAGE 1-B

$$-\text{NH}-(\text{CH}_2)_5-\text{Me}$$

CM 2

CRN 14797-73-0
CMP C1 04

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{O}=\text{C}_1-\text{O} \\ \parallel \\ \text{O} \end{array}$$

CRN 153249-58-2
CMP C43 H61 N4 O2

L15 ANSWER 33 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:377297 CAPLUS

DOCUMENT NUMBER: 122:155739

TITLE: Apparatus for methamphetamine immunoassay
Makayama, Hiroshi; Miyazaki, Kimioka; Mitsuoka,
Tadayasu

INVENTOR(S): Matsushita Electric Ind Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

PATENT ASSIGNEE(S):

CODEN: JKKXAP

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06341987	A2	19941213	JP 1993-128757	19930531
JP 3150007	B2	20010326		

PRIORITY APPLN. INFO.: JP 1993-128757 19930531
 AB Disclosed is a method and app. using anti-methamphetamine antibody and methamphetamine structure-contg. fluorescent dye for methamphetamine detn.

by binding competition. Diagrams of the app. and structure of five fluorescent dye salts are presented.

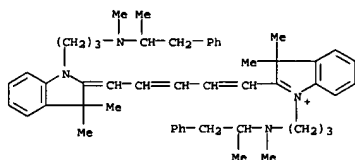
IT 160391-05-9 160391-06-0 160391-07-1

160391-09-3 160391-10-6

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
 (app. and method using anti-methamphetamine antibody and methamphetamine structure-contg. fluorescent dye for methamphetamine detn. by binding competition)

RN 160391-05-9 CAPLUS

CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

RN 160391-06-0 CAPLUS

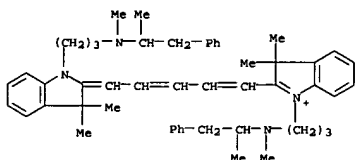
CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[3-[methyl(1-methyl-2-

L15 ANSWER 33 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

CM 1

CRN 160391-08-2

CMF C51 H65 N4



CM 2

CRN 71-50-1

CMF C2 H3 O2



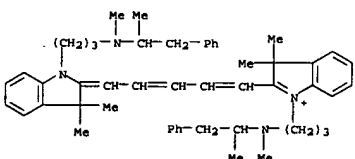
RN 160391-10-6 CAPLUS

CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 160391-08-2

CMF C51 H65 N4



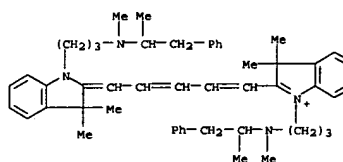
CM 2

CRN 14797-73-0

L15 ANSWER 33 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

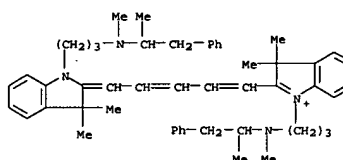
phenylethyl)amino]propyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-, bromide (9CI)

(CA INDEX NAME)

● Br⁻

RN 160391-07-1 CAPLUS

CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-, iodide (9CI) (CA INDEX NAME)

● I⁻

RN 160391-09-3 CAPLUS

CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-, acetate (9CI) (CA INDEX NAME)

L15 ANSWER 33 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

CMF C1 O4



L15 ANSWER 34 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1995:305533 CAPLUS
 DOCUMENT NUMBER: 122 76016
 TITLE: Automated fluorescence apparatus for methamphetamine detection
 INVENTOR(S): Nakayama, Hiroshi; Miyazaki, Kimimasa; Mitsumata, Tadayasu
 PATENT ASSIGNEE(S): Matsushita Electric Ind Co Ltd, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JQOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

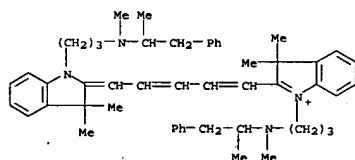
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06300760	A2	19941028	JP 1993-88316	19930415
JP 3127660	B2	20010129		

PRIORITY APPL. INFO.: JP 1993-88316 19930415
 AB Disclosed is a computer-controlled fluorescence app. for detn. of trace amt. of methamphetamine and its derivs. The anal. is an immunoassay based

on the increase of fluorescence intensity upon binding of the monoclonal anti-methamphetamine antibody and an antigen-like dye (structure given).
 IT 160391-05-9 160391-06-0 160391-07-1
 160391-09-3 160391-10-6

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (automated fluorescence app. and immunoassay using monoclonal antibody and analog dye for detn. of methamphetamine and derivs.)

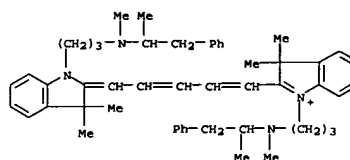
RN 160391-05-9 CAPLUS
 CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

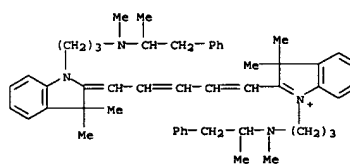
RN 160391-06-0 CAPLUS
 CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[3-[methyl(1-methyl-2-

L15 ANSWER 34 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)
 phenylethyl)amino]propyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-, bromide (9CI)
 (CA INDEX NAME)



● Br⁻

RN 160391-07-1 CAPLUS
 CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-, iodide (9CI)
 (CA INDEX NAME)

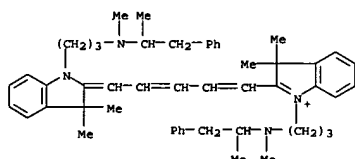


● I⁻

RN 160391-09-3 CAPLUS
 CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-, acetate (9CI)
 (CA INDEX NAME)

L15 ANSWER 34 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)
 CM 1

CRN 160391-08-2
 CMP C51 H65 N4

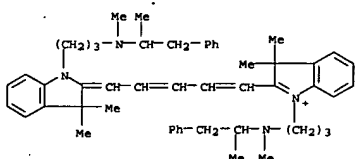


CM 2
 CRN 71-50-1
 CMP C2 H3 O2



RN 160391-10-6 CAPLUS
 CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[3-[methyl(1-methyl-2-phenylethyl)amino]propyl]-, perchlorate (9CI) (CA INDEX NAME)

CM 1
 CRN 160391-08-2
 CMP C51 H65 N4



CM 2
 CRN 14797-73-0

L15 ANSWER 34 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)
 CMP Cl O4

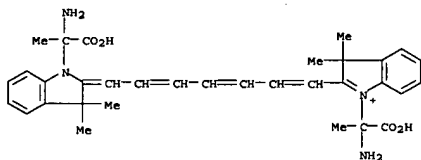


L15 ANSWER 35 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1994:453514 CAPLUS
 DOCUMENT NUMBER: 121:53514
 TITLE: Merocyanine dyes and merocyanine dye-labeled protein
 INVENTOR(S): Tomita, Yoshinori; Okamoto, Hisashi; Yamamoto, Nobuko;
 PATENT ASSIGNEE(S): Kawaguchi, Masahiro
 SOURCE: Canon Kk, Japan
 Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

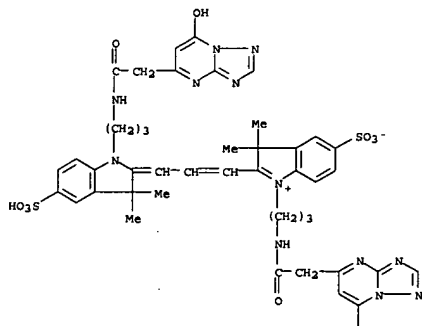
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06123740	A2	19940506	JP 1992-272916	19921012

PRIORITY APPLN. INFO.: MARPAT 121:53514
 OTHER SOURCE(S):
 AB The title automatic device (diagram presented) contains a sampling cup which comprises a filter-contg. sepg. chamber for removing insol. ppt. and a filtrate-retaining chamber for spectrometric detection of the target analyte, i.e. HDL-cholesterol. Merocyanine dyes comprising N-contg. hetero-ring and carboxy group are disclosed for peptide or protein labeling. Two of such dyes were synthesized using trimethyl-indolin, and 2-bromopropionic acid as starting materials.
 IT 156366-33-5
 RL: ANST (Analytical study)
 (merocyanine dye, for protein labeling)
 RN 156366-33-5 CAPLUS
 CN 3H-Indolium, 1-(1-amino-1-carboxyethyl)-2-[7-(1-(1-amino-1-carboxyethyl)-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)-1,3,5-heptatrienyl]-3,3-dimethyl-, bromide (9CI) (CA INDEX NAME)

● Br⁻

L15 ANSWER 36 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

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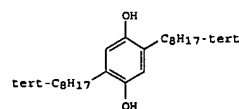
OH

L15 ANSWER 36 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1994:311316 CAPLUS
 DOCUMENT NUMBER: 120:311316
 TITLE: Silver halide color photographic material
 INVENTOR(S): Hirabayashi, Shigeto; Kawashima, Yasuhiko; Usagawa, Yasushi
 PATENT ASSIGNEE(S): Konishi Photo Ind, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 75 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05181230	A2	19930723	JP 1991-358334	19911227

PRIORITY APPLN. INFO.: JP 1991-358334 19911227
 OTHER SOURCE(S): MARPAT 120:311316
 GI



AB In the title material comprising a reflective support having thereon blue-sensitive silver halide emulsion layers, green-sensitive silver halide emulsion layers, etc., at least one layer other than silver halide emulsion layers contains one or more silver salts of dyes and phenol or hydroquinone deriva. (Markush structures given). I is an example of said hydroquinone deriva. The title material shows high sensitivity.
 IT 147641-63-2
 RL: TEM (Technical or engineered material use); USES (Uses) (photog. material contg.)
 RN 147641-63-2 CAPLUS
 CN 3H-Indolium, 2-[3-[1,3-dihydro-1-[[7-(7-hydroxy(1,2,4)triazolo[1,5-a]pyrimidin-5-yl)acetyl]amino]propyl]-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1-propenyl]-1-[[7-(7-hydroxy(1,2,4)triazolo[1,5-a]pyrimidin-5-yl)acetyl]amino]propyl]-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

L15 ANSWER 37 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1994:293593 CAPLUS
 DOCUMENT NUMBER: 120:293593
 TITLE: Pentamethinecyanine, trimethylindolenium, and aminobutyl methamphetamine derivative halogen salts for fluorescence immunoassay of methamphetamine
 INVENTOR(S): Shigefuji, Osayuki; Yugawa, Keiko; Nakayama, Hiroshi; Miyazaki, Kimimasa; Mitsumata, Tadayasu
 PATENT ASSIGNEE(S): Matsushita Electric Ind Co Ltd, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKOXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06066725	A2	19940311	JP 1992-221202	19920820
JP 2698730	B2	19980119		
US 5378634	A	19950103	US 1993-102426	19930805
US 5488114	A	19960130	US 1994-306936	19940916

PRIORITY APPLN. INFO.: JP 1992-221202 19920820
 JP 1992-305219 19921116
 US 1993-102426 19930805

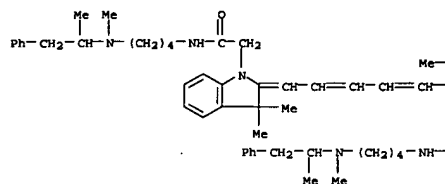
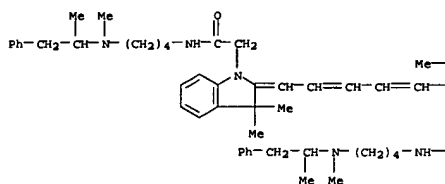
AB Disclosed is an immunoassay using halogen salts of deriva. of Pentamethinecyanine, trimethylindolenium or aminobutyl methamphetamine as fluorescent label or label precursor, and anti-methamphetamine antibody. Thus, bromide salts of the fluorescent label or precursor were prep'd. and used with antibody for methamphetamine detn. by immunoassay.
 IT 155205-77-9 155205-78-0 155205-79-1
 155205-81-5
 RL: ANST (Analytical study)
 (as fluorescent label, for immunoassay of methamphetamine)
 RN 155205-77-9 CAPLUS
 CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[2-[[4-[methyl(1-methyl-2-phenylethyl)amino]butyl]amino]-2-oxoethyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[2-[[4-[methyl(1-methyl-2-phenylethyl)amino]butyl]amino]-2-oxoethyl]-, chloride (9CI) (CA INDEX NAME)

L15 ANSWER 37 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

L15 ANSWER 37 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

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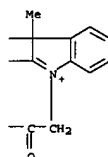
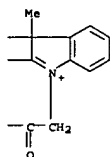


● Cl⁻

● Br⁻

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PAGE 1-B



RN 155205-78-0 CAPLUS
CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[2-[[4-[methyl(1-methyl-2-phenylethyl)amino]butyl]amino]-2-oxoethyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[2-[[4-[methyl(1-methyl-2-phenylethyl)amino]butyl]amino]-2-oxoethyl]-, bromide (9CI) (CA INDEX NAME)

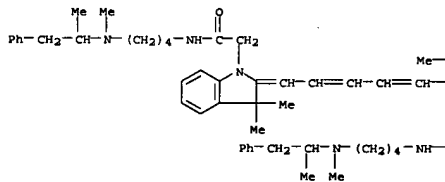
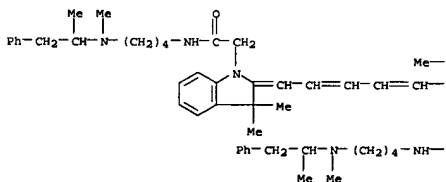
RN 155205-79-1 CAPLUS
CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[2-[[4-[methyl(1-methyl-2-phenylethyl)amino]butyl]amino]-2-oxoethyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[2-[[4-[methyl(1-methyl-2-phenylethyl)amino]butyl]amino]-2-oxoethyl]-, iodide (9CI) (CA INDEX NAME)

L15 ANSWER 37 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

L15 ANSWER 37 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

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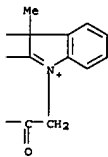
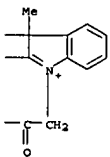
PAGE 1-A



● I⁻

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RN 155205-81-5 CAPLUS
CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[2-[[4-[methyl(1-methyl-2-phenylethyl)amino]butyl]amino]-2-oxoethyl]-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-[2-[[4-[methyl(1-methyl-2-phenylethyl)amino]butyl]amino]-2-oxoethyl]-, acetate (9CI) (CA INDEX NAME)

CM 2
CRN 71-50-1
CMF C2 H3 O2



CM 1

CRN 155205-80-4
CMF C57 H75 N6 O2

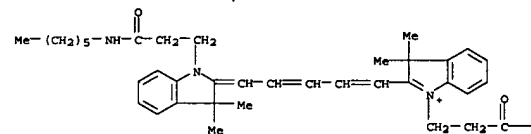
L15 ANSWER 38 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1994:222179 CAPLUS
 DOCUMENT NUMBER: 120:222179
 TITLE: Use of compounds which absorb and/or fluoresce in the
 IR range as markers for liquids
 INVENTOR(S): Albert, Bernhard; Kipper, Juergen; Vamvakaris,
 Christos; Beck, Karin Heidrun
 PATENT ASSIGNEE(S): BASF A.-G., Germany
 SOURCE: Ger. Offen., 12 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4224301	A1	19940127	DE 1992-4224301	19920723
WO 9402570	A1	19940203	WO 1993-EP1830	19930713
W:	AT, AU, BB, BG, BR, BY, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MM, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, VN			
RW:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BP, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
EP 656929	A1	19950614	EP 1993-915892	19930713
EP 656929	B1	19970205		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE			
JP 07509507	T2	19951019	JP 1993-503916	19930713
HU 71272	A2	19951128	HU 1995-182	19930713
HU 214637	B	19980428		
IL 106322	A1	19960912	IL 1993-106322	19930713
AU 673530	B2	19961114	AU 1993-45678	19930713
AU 9345678	A1	19940214		
AT 148736	E	19970215	AT 1993-915892	19930713
ES 2097525	T3	19970401	ES 1993-915892	19930713
RU 2109796	C1	19980427	RU 1995-105438	19930713
PL 175152	B1	19981130	PL 1993-307175	19930713
BR 9306754	A	19981208	BR 1993-6754	19930713
ZA 9305300	A	19950123	ZA 1993-5300	19930722
CN 1085239	A	19940413	CN 1993-116852	19930723
CN 1045984	B	19991027		
FI 9500227	A	19950119	FI 1995-227	19950119
NO 9500213	A	19950120	NO 1995-213	19950120
US 5804447	A	19980908	US 1997-844861	19970423
US 5998211	A	19991207	US 1998-116897	19980717
NO 2000003811	A	19950120	NO 2000-3811	20000725
PRIORITY APPLN. INFO.:			DE 1992-4224301 A	19920723
			DE 1992-4243774 A	19921223
			DE 1992-4243776 A	19921223
			WO 1993-EP1830 W	19930713
			US 1995-367315 B1	19950120
			US 1995-562789 B1	19951127
			US 1997-844861 A1	19970423

AB Compds. from the class of the phthalocyanine, naphthalocyanine, nickel-dithiolen complex, aminium compds. of arom. amines, methine dyes or azulene quadratic acid dyes, the max. absorption of which is in the 700

L15 ANSWER 38 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)
 to 1,200 nm range are used as markers for liqs. The markers are then detd. in liqs. such as diesel fuel and fuel oil using a photometer.
 IT 153249-59-3
 RL: USES (Uses)
 (as marker dye for diesel and fuel oils)
 RN 153249-59-3 CAPLUS
 CN 3H-Indolium, 1-[3-(hexylamino)-3-oxopropyl]-2-[5-[1-[3-(hexylamino)-3-oxopropyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-, perchlorate (9CI) (CA INDEX NAME)
 CM 1
 CRN 153249-58-2
 CMF C43 H61 N4 O2

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—NH—(CH₂)₅—Me

CM 2

CRN 14797-73-0
CMF C1 O4

L15 ANSWER 38 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

L15 ANSWER 39 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1994:222178 CAPLUS
 DOCUMENT NUMBER: 120:222178
 TITLE: Use of compounds which absorb and/or fluoresce in the
 IR range as markers for liquids
 INVENTOR(S): Albert, Bernhard; Kipper, Juergen; Vamvakaris,
 Christos; Beck, Karin Heidrun; Wagenblast, Gerhard
 PATENT ASSIGNEE(S): BASF A.-G., Germany
 SOURCE: PCT Int. Appl., 34 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9402570	A1	19940203	WO 1993-EP1830	19930713
W:	AT, AU, BB, BG, BR, BY, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MM, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, VN			
RW:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BP, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
DE 4224301	A1	19940127	DE 1992-4224301	19920723
DE 4243774	A1	19940630	DE 1992-4243774	19921223
DE 4243776	A1	19940630	DE 1992-4243776	19921223
EP 656929	A1	19950614	EP 1993-915892	19930713
EP 656929	B1	19970205		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE			
JP 07509507	T2	19951019	JP 1993-503916	19930713
AU 673530	B2	19961114	AU 1993-45678	19930713
AU 9345678	A1	19940214		
RU 2109796	C1	19980427	RU 1995-105438	19930713
PL 175152	B1	19981130	PL 1993-307175	19930713
BR 9306754	A	19981208	BR 1993-6754	19930713
NO 9500213	A	19950120	NO 1995-213	19950120
NO 2000003811	A	19950120	NO 2000-3811	20000725
PRIORITY APPLN. INFO.:			DE 1992-4224301 A	19920723
			DE 1992-4243774 A	19921223
			DE 1992-4243776 A	19921223
			WO 1993-EP1830 W	19930713

AB Compds. from the class of the phthalocyanine, naphthalocyanine, nickel-dithiolen complex, aminium compds. of arom. amines, methine dyes or azulene quadratic acid dyes, the max. absorption of which is in the 600

to 1,200 nm range and/or the max. fluorescence of which is in the 620 to 1,200 nm range, are used as markers for liqs. The markers are then detd. in liqs. such as diesel fuel and fuel oil using a photometer.

IT 153249-59-3
 RL: USES (Uses)
 (as marker dye for diesel and fuel oils)

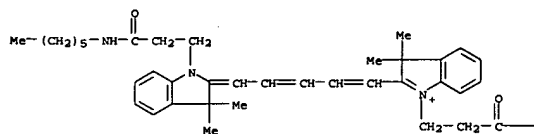
RN 153249-59-3 CAPLUS
 CN 3H-Indolium, 1-[3-(hexylamino)-3-oxopropyl]-2-[5-[1-[3-(hexylamino)-3-oxopropyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 153249-58-2
CMF C43 H61 N4 O2

L15 ANSWER 39 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

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—NH—(CH₂)₅—Me

CM 2

CRN 14797-73-0
CMF C1 O4

L15 ANSWER 40 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

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—NH—(CH₂)₅—Me

CM 2

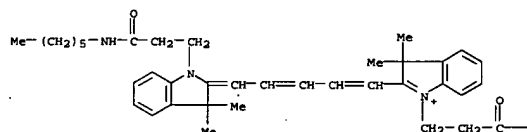
CRN 14797-73-0
CMF C1 O4

L15 ANSWER 40 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1994:166995 CAPLUS
DOCUMENT NUMBER: 120:166995
TITLE: IR-absorbing dyes for use in printing inks
INVENTOR(S): Albert, Bernhard; Closs, Friedrich; Kipper, Juergen; Kurtz, Walter; Beck, Karin Heidrun; Griebel, Rudolf
PATENT ASSIGNEE(S): BASF A.-G., Germany
SOURCE: Ger. Offen., 13 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4202038	A1	19930729	DE 1992-4202038	19920125
EP 553614	A1	19930804	EP 1993-100119	19930107
EP 553614	B1	19970716		
JP 07247454	A2	19950926	JP 1993-8951	19930122
US 5282894	A	19940201	US 1993-8590	19930125
PRIORITY APPLN. INFO.:			DE 1992-4202038	19920125
AB Phthalocyanine deriva., Ni dithiolene complexes, arom. ammonium compds., methine dyes, and azulenesquaric acid dyes (absorption max. 700-1200 nm) are useful as IR absorbers in printing inks, e.g., for printing bar codes.				
An ink contg. Cu hexadeca(phenylthio)phthalocyanine and PhOH-modified rosin gave prints on paper with absorption max. 780 nm.				
IT 153249-59-3				
RL: USES (Uses) (IR absorbers, for use in printing inks)				
RN 153249-59-3				
CN 3H-Indolium, 1-[3-(hexylamino)-3-oxopropyl]-2-[5-[1-[3-(hexylamino)-3-oxopropyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-, perchlorate (9CI) (CA INDEX NAME)				
CM 1				
CRN 153249-58-2				
CMF C43 H61 N4 O2				

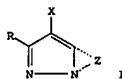
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L15 ANSWER 41 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1993:659405 CAPLUS
DOCUMENT NUMBER: 119:259405
TITLE: Silver halide color photographic material
INVENTOR(S): Hirabayashi, Shigeto; Usagawa, Yasushi; Kawashima, Yasuhiko; Kagawa, Nobuaki
PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 92 pp.
CODEN: JKOXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05027371	A2	19930205	JP 1991-207399	19910724
US 5324625	A	19940628	US 1992-909667	19920707
PRIORITY APPLN. INFO.:			JP 1991-207399	19910724
GI				



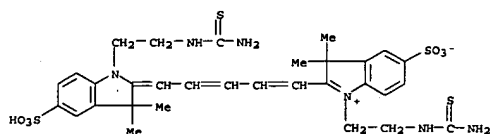
AB In the title material comprising a support having thereon blue-sensitive silver halide emulsion layers, green-sensitive silver halide emulsion layers, etc., at least one of said silver halide emulsion layers contains one or more dye silver salts. Addnl. claims specify that the title material also contains yellow, cyan, and magenta couplers. For example, magenta couplers are represented by I. For I, R = H or substituent; Z = nonmetallic atoms for forming N-contg. heterocyclic ring; said heterocyclic ring may have substituents; X = H or group to be released upon reaction with an oxidized color developing agent. The title material shows high sensitivity.

IT 151067-89-9
RL: USES (Uses)
(dye, in photog. material)

RN 151067-89-9 CAPLUS

CN 3H-Indolium, 1-[2-((aminothioxomethyl)amino)ethyl]-2-[5-[1-[2-((aminothioxomethyl)amino)ethyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

L15 ANSWER 41 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)



L15 ANSWER 42 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1993:637866 CAPLUS
 DOCUMENT NUMBER: 119:237866
 TITLE: Silver halide photographic photosensitive material containing diffusion-resistant dye
 INVENTOR(S): Kagawa, Nobuaki; Kawashima, Yasuhiko; Usagawa, Yasushi; Hirabayashi, Shigeto
 PATENT ASSIGNEE(S): Konica Co., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.
 CODEN: JKXXAP
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05011409	A2	19930122	JP 1991-189486	19910704
JP 2897852	B2	19990531		

PRIORITY APPLN. INFO.: JP 1991-189486 19910704

AB The title material contains in .gtoreq.1 layer(s) of hydrophilic protective colloidal layers coated on a support .gtoreq.1 Ag salt of methine dyes (Dye)11[-(L)12-Sal]13 (Dye = a methine dye structure; L = divalent connective group using atom or at. group selected from C, N, O, and S as skeleton; Sal = group which forms sparingly sol. salt with Ag ion; 11 = 1, 2; 12 = O, 1; 13 = 1, 2, 3, 4). The dye can be selected

with good absorption spectral characteristics, is diffusion resistant and has superior leaching and bleaching characteristics, and shows no ill effects on photog. characteristics such as fog, desensitization, etc., and no residual color staining even under rapid processing.

IT 151067-89-9D, silver salt

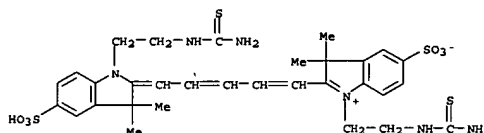
RL: USES (Uses)

(photog. material with hydrophilic protective colloidal layer contg.)

RN 151067-89-9 CAPLUS

CN 3H-Indolium, 1-[2-[(aminothioxomethyl)amino]ethyl]-2-[5-[1-(2-

[(aminothioxomethyl)amino]ethyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)



L15 ANSWER 43 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1993:244492 CAPLUS
 DOCUMENT NUMBER: 118:244492
 TITLE: Silver halide color photographic light-sensitive material
 INVENTOR(S): Hirabayashi, Shigeto; Kagawa, Nobuaki; Usagawa, Yasushi; Kawashima, Yasuhiko
 PATENT ASSIGNEE(S): Konica Corp., Japan
 SOURCE: Eur. Pat. Appl., 122 pp.
 CODEN: EPXKDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 521668	A1	19930107	EP 1992-305932	19920626
JP 05011399	A2	19930122	JP 1991-189488	19910704
US 5290669	A	19940301	US 1992-907135	19920629

PRIORITY APPLN. INFO.: JP 1991-189488 19910704

OTHER SOURCE(S): MARPAT 118:244492

AB The title multilayer color material comprises in .gtoreq.1 photog. component layer a Ag salt of a dye. The blue-sensitive layer contains a benzoylacetone-type yellow coupler and the red-sensitive layer contains a naphthoic-type cyan coupler. The material has properties of high sharpness, high speed, less fogging, and excellent raw stock stability.

IT 147641-63-2D, silver complex

RL: USES (Uses)

(photog. film contg.)

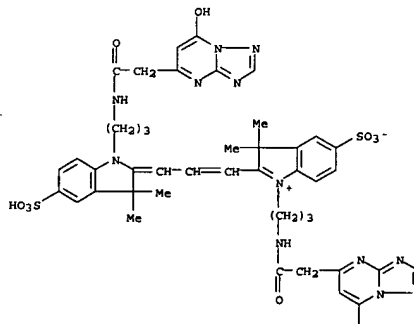
RN 147641-63-2 CAPLUS

CN 3H-Indolium, 2-[3-[1,3-dihydro-1-[3-[[[(7-hydroxy[1,2,4]triazolo[1,5-a]pyrimidin-5-yl)acetyl]amino]propyl]-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1-propenyl]-1-[3-[[[(7-hydroxy[1,2,4]triazolo[1,5-a]pyrimidin-5-yl)acetyl]amino]propyl]-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA

INDEX NAME)

L15 ANSWER 43 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

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PAGE 2-A

OH

L15 ANSWER 44 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1992:237373 CAPLUS

DOCUMENT NUMBER: 116:237373

TITLE: Polymethine dyes and optical recording media containing them

INVENTOR(S): Acker, Michael; Neumann, Peter; Albert, Bernhard; Brosius, Sibylle; Schomann, Klaus Dieter;

Kuppelmaier,

Harald

PATENT ASSIGNEE(S): BASF A.G., Germany

SOURCE: Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

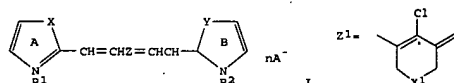
DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 464543	A1	19920108	EP 1991-110348	19910622
EP 464543	B1	19940831		
R: CH, DE, FR, GB, IT, LI				
DE 4021078	A1	19920109	DE 1990-4021078	19900703
JP 04252268	A2	19920908	JP 1991-160191	19910701
PRIORITY APPLN. INFO.: DE 1990-4021078 19900703				
OTHER SOURCE(S): MARPAT 116:237373				
GI				



AB The dyes [I; A = anion; R1 = (CH2)mQ+R3R4R5; Q = N, P; R2 = R1, (un)substituted C1-22-alkyl; R3-R5 = (un)substituted Ph or C5-7-cycloalkyl or C1-22-alkyl; X, Y = NH, O, S, CMe2, CH:CH; Z = CR6, CH:CR6CH, Z1; R6 = H, Cl, Br, C1-6-alkyl; X1 = direct link, CH2, C2-7-alkylidene; m = 1-10;

n = 2, 3; rings A and B are annelated] are obtained for use in light-sensitive recording media. Thus, 2,3,3-trimethylindolenine 20, (3-bromopropyl)triethylammonium bromide 20, and PhN:CHCH:CHCH:CHNHPH.HCl 10 mmol were combined to give 64% I (R1 = R2 = Et3N+(CH2)3; X = Y = CMe2; A = Br; n = 3; Z = CH:CHCH), lambda max 747 nm (EtOH).

IT 141473-13-4P 141473-22-5P
RL: IMP (Industrial manufacture); PREP (Preparation)
(prepn. of, as dye for optical recording materials)

RN 141473-13-4 CAPLUS

CN 3H-Indolium,

2-[7-[[1,3-dihydro-3,3-dimethyl-1-[3-(triethylammonio)propyl]-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-1-[3-(triethylammonio)propyl]-, tribromide (9CI) (CA INDEX NAME)

L15 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1992:131167 CAPLUS

DOCUMENT NUMBER: 116:131167

TITLE: Carbamate or amide group-containing heterocyclic polymethine dyes and optical recording media containing them

INVENTOR(S): Acker, Michael; Albert, Bernhard; Brosius, Sibylle; Schomann, Klaus Dieter; Kuppelmaier, Harald

PATENT ASSIGNEE(S): BASF A.G., Germany

SOURCE: Ger. Offen., 17 pp.

CODEN: GWXXBX

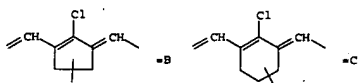
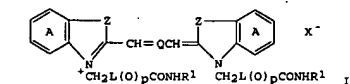
DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4016298	A1	19911128	DE 1990-4016298	19900521
EP 459201	A1	19911204	EP 1991-107671	19910511
EP 459201	B1	19950809		
R: CH, DE, FR, GB, IT, LI				
JP 04227966	A2	19920818	JP 1991-112827	19910517
JP 2977940	B2	19991115		
US 5221751	A	19930622	US 1991-702495	19910520
PRIORITY APPLN. INFO.: DE 1990-4016298 19900521				
OTHER SOURCE(S): MARPAT 116:131167				
GI				



AB The polymethines [I; L = C1-12-alkylene; Q = CHCR2:CH, CHCH:CR2CH:CH, B, C, R1 = H, (un)substituted C1-20-(oxa)alkyl or C5-7-cycloalkyl or Ph; R2 =

H, Br, Cl, C1-6-alkyl; X = anion; Z = N, O, S, CMe2, cyclohexylidene, CH:CH; p = 0, 1; the A rings may be substituted or benzoannelated] are obtained for use as laser-sensitive recording dyes. Thus, 1-[(hexylcarbamoyl)methyl]-2,3,3-trimethyl-3H-indolium iodide was heated at reflux with glutaraldehyde dianil hydrochloride in EtOH, followed by addn. of Ac2O, Et3N, and NaI to give I (L = direct bond, Q = CHCH:CHCH:CH,

R = hexyl, X = I, Z = CMe2, p = 0), lambda max = 741 nm in MeOH.

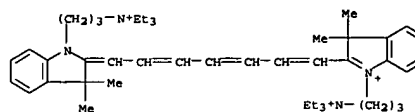
IT 139544-10-8P 139544-12-0P 139544-13-1P

139544-14-2P 139544-15-3P 139544-16-4P

139544-18-6P

RL: IMP (Industrial manufacture); PREP (Preparation)

L15 ANSWER 44 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)



• 2 Br-

RN 141473-22-5 CAPLUS

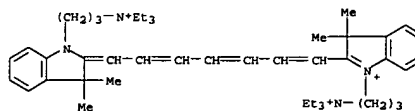
CN 3H-Indolium,

2-[7-[[1,3-dihydro-3,3-dimethyl-1-[3-(triethylammonio)propyl]-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-1-[3-(triethylammonio)propyl]-, salt with heptafluorobutanoic acid (1:3) (9CI) (CA INDEX NAME)

CM 1

CRN 141473-21-4

CMP C45 H69 N4



CM 2

CRN 45048-62-2

CMP C4 F7 O2

F3C-CF2-CF2-CO2-

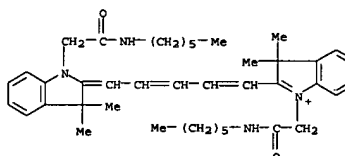
L15 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

(prepn. of, as dye for optical recording)

RN 139544-10-8 CAPLUS

CN 3H-Indolium,

1-[2-[[1,1-dimethylethylamino]-2-oxoethyl]-2-[5-[1-[2-[[1,1-dimethylethylamino]-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-, iodide (9CI) (CA INDEX NAME)



• I-

RN 139544-12-0 CAPLUS

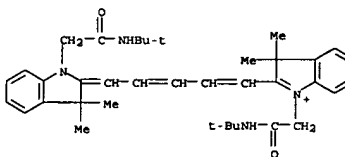
CN 3H-Indolium,

1-[2-[[1,1-dimethylethylamino]-2-oxoethyl]-2-[5-[1-[2-[[1,1-dimethylethylamino]-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 139544-11-9

CMP C37 H49 N4 O2



CM 2

CRN 14874-70-5

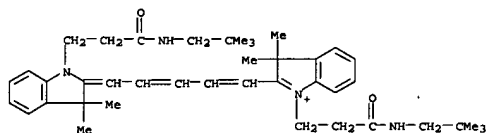
CMP B F4

CCI CCS

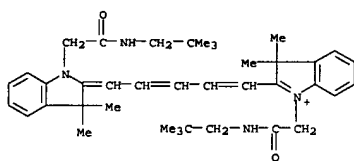
L15 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)



RN 139544-13-1 CAPLUS
CN 3H-Indolium, 1-[3-[(2,2-dimethylpropyl)amino]-3-oxopropyl]-2-[5-[1-[3-[(2,2-dimethylpropyl)amino]-3-oxopropyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-, iodide (9CI) (CA INDEX NAME)

● I⁻

RN 139544-14-2 CAPLUS
CN 3H-Indolium, 1-[2-[(2,2-dimethylpropyl)amino]-2-oxoethyl]-2-[5-[1-[2-[(2,2-dimethylpropyl)amino]-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-, iodide (9CI) (CA INDEX NAME)

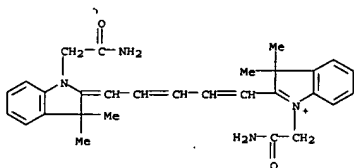
● I⁻

L15 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

PAGE 1-B

—NH—(CH₂)₅—Me

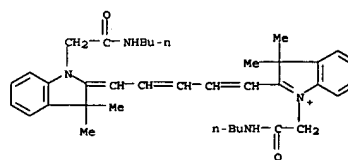
RN 139544-18-6 CAPLUS
CN 3H-Indolium, 1-[2-amino-2-oxoethyl]-2-[5-[1-[2-amino-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-, iodide (9CI) (CA INDEX NAME)

● I⁻

IT 139543-73-0P 139543-74-1P 139543-77-4P
139543-78-5P 139543-79-6P 139543-80-9P
139543-82-1P 139543-84-3P 139543-85-4P
139543-86-5P 139543-88-7P 139543-90-1P
139543-91-2P 139543-92-3P 139543-93-4P
139543-94-5P 139543-95-6P
R1: IMF (Industrial manufacture); PREP (Preparation)
(prepn. of, as near-IR-absorbing dye for optical recording)
RN 139543-73-0 CAPLUS
CN 3H-Indolium, 1-[2-(hexylamino)-2-oxoethyl]-2-[7-[1-[2-(hexylamino)-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-, iodide (9CI) (CA INDEX NAME)

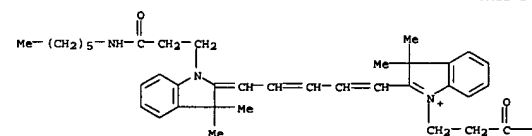
L15 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

RN 139544-15-3 CAPLUS
CN 3H-Indolium, 1-[2-(butylamino)-2-oxoethyl]-2-[5-[1-[2-(butylamino)-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-, iodide (9CI) (CA INDEX NAME)

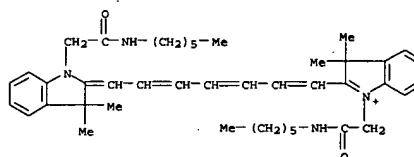
● I⁻

RN 139544-16-4 CAPLUS
CN 3H-Indolium, 1-[3-(hexylamino)-3-oxopropyl]-2-[5-[1-[3-(hexylamino)-3-oxopropyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-, iodide (9CI) (CA INDEX NAME)

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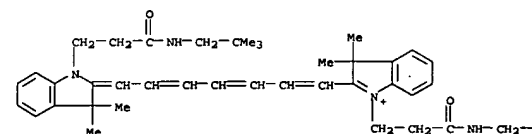
● I⁻

L15 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

● I⁻

RN 139543-74-1 CAPLUS
CN 3H-Indolium, 1-[3-[(2,2-dimethylpropyl)amino]-3-oxopropyl]-2-[7-[1-[3-[(2,2-dimethylpropyl)amino]-3-oxopropyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-, iodide (9CI) (CA INDEX NAME)

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● I⁻

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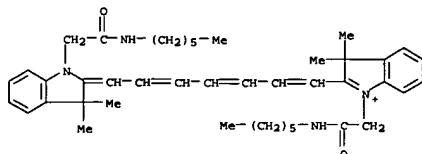
—CMe₃

RN 139543-77-4 CAPLUS
CN 3H-Indolium, 1-[2-(hexylamino)-2-oxoethyl]-2-[7-[1-[2-(hexylamino)-2-

L15 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

oxoethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 139543-76-3
CMP C43 H59 N4 O2

CM 2

CRN 14797-73-0
CMP C1 O4

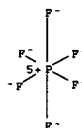
RN 139543-78-5 CAPLUS

CN 3H-Indolium, 1-[2-(hexylamino)-2-oxoethyl]-2-[7-[1-[2-(hexylamino)-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1

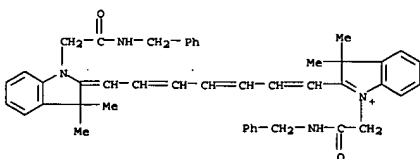
CRN 139543-76-3
CMP C43 H59 N4 O2

L15 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

CRN 16919-18-9
CMP F6 P
CCI CCS

RN 139543-80-9 CAPLUS

CN 3H-Indolium, 2-[7-[1,3-dihydro-3,3-dimethyl-1-[2-oxo-2-[(phenylmethyl)amino]ethyl]-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-1-[2-oxo-2-[(phenylmethyl)amino]ethyl]-, bromide (9CI) (CA INDEX NAME)

● Br⁻

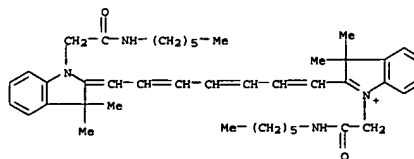
RN 139543-82-1 CAPLUS

CN 3H-Indolium, 2-[7-[1,3-dihydro-3,3-dimethyl-1-[2-oxo-2-(propylamino)ethyl]-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-1-[2-oxo-2-(propylamino)ethyl]-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 139543-81-0
CMP C37 H47 N4 O2

L15 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)



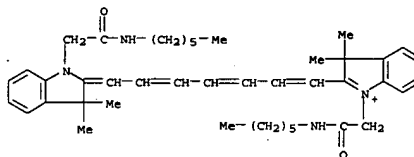
CM 2

CRN 14874-70-5
CMP B F4
CCI CCS

RN 139543-79-6 CAPLUS

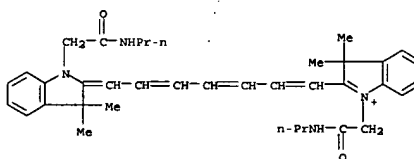
CN 3H-Indolium, 1-[2-(hexylamino)-2-oxoethyl]-2-[7-[1-[2-(hexylamino)-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 139543-76-3
CMP C43 H59 N4 O2

CM 2

L15 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)



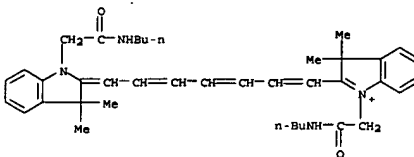
CM 2

CRN 14874-70-5
CMP B F4
CCI CCS

RN 139543-84-3 CAPLUS

CN 3H-Indolium, 1-[2-(butylamino)-2-oxoethyl]-2-[7-[1-[2-(butylamino)-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 139543-83-2
CMP C39 H51 N4 O2

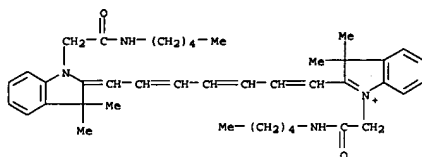
CM 2

CRN 14874-70-5
CMP B F4
CCI CCS

L15 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)



RN 139543-85-4 CAPLUS
 CN 3H-Indolium,
 2-[7-[1,3-dihydro-3,3-dimethyl-1-[2-oxo-2-(pentylamino)ethyl]-
 2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-1-[2-oxo-2-
 (pentylamino)ethyl]-, iodide (9CI) (CA INDEX NAME)

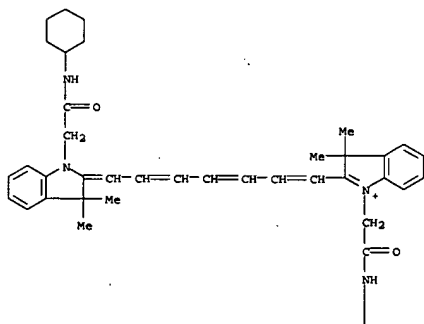


● I-

RN 139543-86-5 CAPLUS
 CN 3H-Indolium,
 2-[7-[1,3-dihydro-3,3-dimethyl-1-[2-(octylamino)-2-oxoethyl]-
 2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-1-[2-(octylamino)-2-
 oxoethyl]-, iodide (9CI) (CA INDEX NAME)

L15 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

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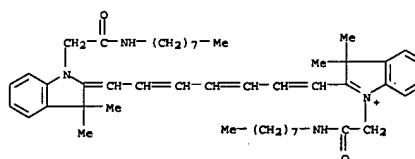


CM 2
 CRN 14874-70-5
 CMP B P4
 CCI CCS



RN 139543-90-1 CAPLUS
 CN 3H-Indolium, 2-[7-[1,3-dihydro-1-[2-[(2-hydroxyethyl)amino]-2-oxoethyl]-
 3,3-dimethyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-1-[2-[(2-
 hydroxyethyl)amino]-2-oxoethyl]-3,3-dimethyl-, tetrafluoroborate(1-)
 (9CI) (CA INDEX NAME)

L15 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)



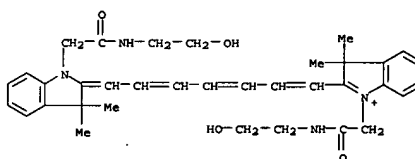
● I-

RN 139543-88-7 CAPLUS
 CN 3H-Indolium, 1-[2-(cyclohexylamino)-2-oxoethyl]-2-[7-[1-[2-
 (cyclohexylamino)-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-
 1,3,5-heptatrienyl]-3,3-dimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX
 NAME)

CM 1
 CRN 139543-87-6
 CMP C43 H55 N4 O2

L15 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

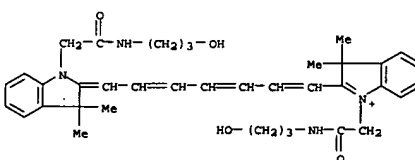
CM 1
 CRN 139543-89-8
 CMP C35 H43 N4 O4



CM 2
 CRN 14874-70-5
 CMP B P4
 CCI CCS

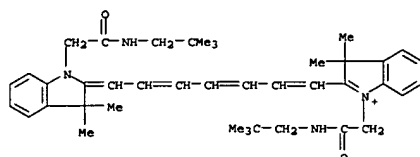


RN 139543-91-2 CAPLUS
 CN 3H-Indolium, 2-[7-[1,3-dihydro-1-[2-[(3-hydroxypropyl)amino]-2-oxoethyl]-
 3,3-dimethyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-1-[2-[(3-
 hydroxypropyl)amino]-2-oxoethyl]-3,3-dimethyl-, iodide (9CI) (CA INDEX
 NAME)

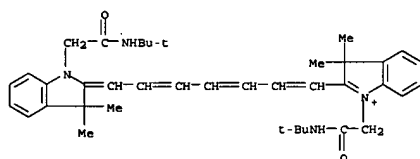


● I-

L15 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)
 RN 139543-92-3 CAPLUS
 CN 3H-Indolium,
 1-[2-[(2,2-dimethylpropyl)amino]-2-oxoethyl]-2-[7-[1-[2-[(1,1-dimethylpropyl)amino]-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-, iodide (9CI) (CA INDEX NAME)

● I⁻

RN 139543-93-4 CAPLUS
 CN 3H-Indolium,
 1-[2-[(1,1-dimethylethyl)amino]-2-oxoethyl]-2-[7-[1-[2-[(1,1-dimethylethyl)amino]-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-, iodide (9CI) (CA INDEX NAME)

● I⁻

RN 139543-94-5 CAPLUS
 CN 3H-Indolium, 1-(2-amino-2-oxoethyl)-2-[7-[1-(2-amino-2-oxoethyl)-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-, bromide (9CI) (CA INDEX NAME)

L15 ANSWER 46 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1990:449700 CAPLUS
 DOCUMENT NUMBER: 113:49700
 TITLE: IR-sensitive silver halide photographic materials
 INVENTOR(S): Yoshida, Kazuhiro; Usagawa, Yasushi; Kagawa, Nobuaki
 PATENT ASSIGNEE(S): Konica Co., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JIOXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01303433	A2	19891207	JP 1988-135011	19880531
JP 2544652	B2	19961016		

PRIORITY APPLN. INFO.: MARPAT 113:49700 JP 1988-135011 19880531

OTHER SOURCE(S):
 GI For diagram(s), see printed CA issue.

AB The title materials have emulsion layers sensitized using cationic di- or tricarbocyanine dyes, and hydrophilic colloid layer(s) contg. dyes I contg. gtoreq.3 acidic groups (R1-6 = alkyl; A1-2 = pyrrolopyridine, thienopyrrole or fluoropyrrole rings; L = methine; X- = anion; n = 1-2). These materials have high sensitivity to IR and are free from stains

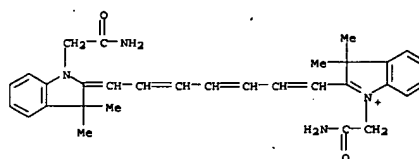
after processing, and are useful for imaging by scanning with semiconductor lasers. Thus, a Ag(Cl,Br) emulsion mixed with IR sensitizer dye II (50

mL 0.1% soln. per mol Ag) and other agents, an antihalation compn. contg. gelatin, dye III (200 mg/m2 when coated), and other agents, and a gelatin protective compn. were prepd. and were simultaneously applied on polyethylene-coated paper. Exposed and normally processed paper showed high sensitivity, low fog and no stain, either when the paper was stored or not at 55.degree., 50% humidity for 72 h before exposure.

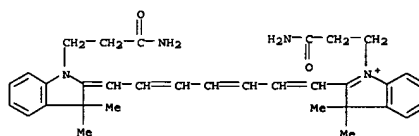
IT 128220-88-2
 RL: USES (Uses)
 (photog. antihalation dye, IR-sensitized photog. materials contg.)

RN 128220-88-2 CAPLUS
 CN 3H-Indolium, 2-[9-[1,3-dihydro-3,3-dimethyl-1-[2-(phosphonoamino)ethyl]sulfo-2H-indol-2-ylidene]-1,3,5,7-nonatetraenyl]-3,3-dimethyl-1-[2-(phosphonoamino)ethyl]sulfo-, inner salt, monopotassium salt (9CI) (CA INDEX NAME)

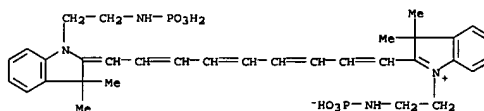
L15 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

● Br⁻

RN 139543-95-6 CAPLUS
 CN 3H-Indolium, 1-(3-amino-3-oxopropyl)-2-[7-[1-(3-amino-3-oxopropyl)-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-, iodide (9CI) (CA INDEX NAME)

● I⁻

L15 ANSWER 46 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

2 [D1-SO₃H]

● K

L15 ANSWER 47 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1990:431867 CAPLUS

DOCUMENT NUMBER: 113:31867

TITLE: Spectrally sensitized silver halide photographic material dyed with a filter dye having good wash-out property and suitable for laser beam recording

INVENTOR(S): Yoshida, Kazuhiro; Usagawa, Yasushi; Kagawa, Nobuaki

PATENT ASSIGNEE(S): Konica Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01303434	A2	19891207	JP 1988-135012	19880531

PRIORITY APPLN. INFO.: MARPAT 113:31867

OTHER SOURCE(S): For diagram(s), see printed CA issue.

GI AB The claimed photog. material has (1) .gtoreq.1 Ag halide emulsion layer(s)

contg. Ag halide grains spectrally sensitized with .gtoreq.1 of cationic tricarboyanine and/or cationic dicarboyanine dyes and (2) .gtoreq.1 hydrophilic colloid layer contg. .gtoreq.1 of the dye of the formula I

(A, B = benzo or naphtho ring structure, R, R1-5= alkyl; these substituents contains .gtoreq.2 ZmPO2R6M; M = H, cation; R6 = H, alkyl, alkoxy, OM; Z

O, amino; m = 0, 1; L = methyne; X = anion; n = 1, 2). The dye has good antihalation and/or antiirradn. effect, has no bad influence on the photog. property and is easily washed out and leaves no unfavorable stain after processing. Therefore, the photog. material is suitable for recording laser beam signal of IR region. Thus, (a) Ag(Br,Cl) emulsion (AgBr 35 mol%) sensitized by an IR spectral sensitizer II, (b) a coating soln. for antihalation layer contg. dye III, fluorescent whitener and other additives (c) a protective coating soln. were coated on a polyethylene-laminated paper sheet to make a black-and-white paper for laser beam recording. It had the mentioned advantages.

IT 127907-08-8

RL: USES (Uses)

(dye, photog. material hydrophilic colloid layer contg., for good wash out property)

RN 127907-08-8 CAPLUS

CN 3H-Indolium, 2-[7-[1,3-dihydro-3,3-dimethyl-1-[2-(phosphonoamino)ethyl]sulfo-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-1-[2-(phosphonoamino)ethyl]sulfo-, inner salt, monosodium salt (9CI) (CA INDEX NAME)

L15 ANSWER 48 OF 52 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1990:148999 CAPLUS

DOCUMENT NUMBER: 112:148999

TITLE: Infrared-sensitized silver halide photographic emulsion material

INVENTOR(S): Takamukai, Yasuhiko; Usagawa, Yasushi; Kagawa, Nobuaki

PATENT ASSIGNEE(S): Konica Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

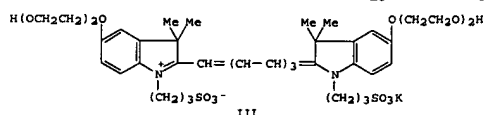
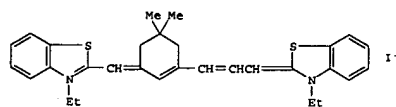
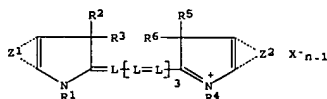
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01233439	A2	19890919	JP 1988-60735	19880314

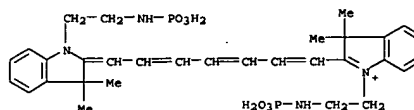
PRIORITY APPLN. INFO.: JP 1988-60735

GI



AB The title material has .gtoreq.1 Ag halide emulsion layers sensitized with a cationic tricarboyanine dye and/or a cationic dicarboyanine and a hydrophilic colloid layer contg. .gtoreq.1 pyrrole polymethine dyes I having .gtoreq.2 acid groups and .gtoreq.2 substituents contg. .gtoreq.1 R7OCH2CH2 (R1-6 = alkyl; Z1-2 = nonmetal atm. group forming benzo or naphtho condensed ring; R7 = H, alkyl; L = methine; n = 1, 2; n = 1 when the dye form an intramol. salt). The storage-stable material shows redn. of residual color from the sensitizer. Thus, a photog. material having Ag(Br,Cl) layer contg. IR-sensitizing benzothiazole methine II and a

L15 ANSWER 47 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)



D1-SO3-

D1-SO3H

● Na

L15 ANSWER 48 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

halation inhibiting hydrophilic layer contg. pyrrole polymethine dye III was heat-treated then exposed, treated in an automatic developer machine, and fixed to give an image with reduced residual color.

IT 126065-96-1

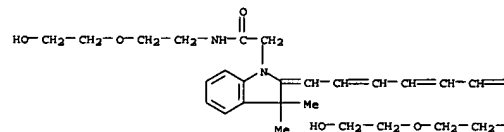
RL: USES (Uses)

(IR sensitized photog. emulsion contg., for storage stability and reduced residual color)

RN 126065-96-1 CAPLUS

CN 3H-Indolium, 2-[7-[1,3-dihydro-1-[2-[[2-(2-hydroxyethoxy)ethyl]amino]-2-oxoethyl]-3,3-dimethylsulfo-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-1-[2-[[2-(2-hydroxyethoxy)ethyl]amino]-2-oxoethyl]-3,3-dimethylsulfo-, inner salt, monopotassium salt (9CI) (CA INDEX NAME)

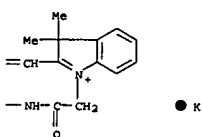
PAGE 1-A



D1-SO3-

D1-SO3H

PAGE 1-B

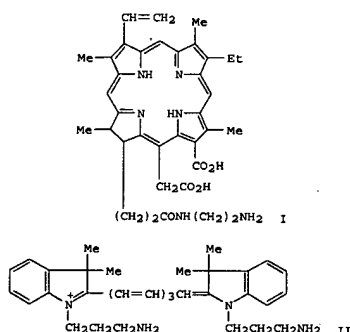


PAGE 1-A

PAGE 1-B

C=C/C=C/C(=C/N(C)C(=O)NCCOCCH2COSSc1ccc(cc1)S(=O)(=O)O)c2ccccc2CC1=C(C)C(=C2C=CC(=C2)S(=O)(=O)[O-])N1C(=C)C=C

L15 ANSWER 50 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)
these expts., neither I nor anti-Leu-1 were toxic in the absence of
light.
Thus, conjugates having high chromophore to Mab ratios can be prep.
using
PGA, and these conjugates may find use as potential photochemotherapeutic
agents.
IT 124519-09-1
RL: PRP (Properties)
(conjugation of, with polyglutamic acid)
RN 124519-09-1 CAPLUS
CN 3H-Indolium, 1-[3-aminopropyl]-2-[7-[1-(3-aminopropyl)-1,3-dihydro-3,3-
dihydroxy-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-, bromide
(9CI)
(CA INDEX NAME)

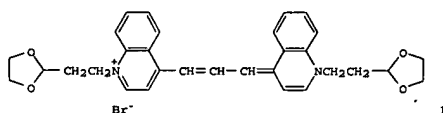
CN(C)Cc1ccc(C)c(C1=CC=CC=C1N(C)CC)C1=CC=CC=C1

When *N,N*-dimethylnitrosourea, were the same for 1 (free or bound to Mab. Mab 9.1 was conjugated to a diaminocyanine, 1,1'-(3-propylene hydrazine)bis(2,3,3',3'-tetramethylindolothiatricarbocyanine (II)), the resultant conjugates were highly aggregated, presumably due to crosslinking via the 2 amino groups. When anti-Leu-1 target cells, HPB-ALL T-leukemia cells treated with the conjugate were exposed to broad-band, long-wavelength UV irradiation, and cell survival evaluated by fluorescence microscopy, a radiant dose of 1000 J/m² was sufficient to kill the cells by 50% with the addition of chlorin e6, buffer, or Mab alone were unaffected. At the oncosis, used in

L15 ANSWER 51 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1987:594296 CAPLUS
 DOCUMENT NUMBER: 107:194296
 TITLE: Carbocyanine dyes for light-induced selective killing of carcinoma cells
 INVENTOR(S): Oseroff, Allan; Foley, James; Cincotta, Louis; Parrish, John A.
 PATENT ASSIGNEE(S): USA
 SOURCE: Eur. Pat. Appl., 21 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 226264	A1	19870624	EP 1986-302602	19860408
EP 226264	B1	19901031		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
CA 1338671	A1	19961022	CA 1986-505955	19860407
JP 61288872	A2	19861219	JP 1986-80966	19860408
JP 2505413	B2	19960612		
AT 57948	E	19901115	AT 1986-302602	19860408
PRIORITY APPLN. INFO.:			US 1985-720711	19850408
			EP 1986-302602	19860408

GI



AB Pos. charged, lipophilic chromophores are described which are selectively taken up and retained by carcinoma cells and the mitochondria, and which sensitize the cells to light of a predetd. wavelength which kills these cells. 1,1'-(2-Ethyl-1,3-dioxolane)kryptocyanine bromide (I) (10⁻⁷M) was incubated with a confluent monolayer of bladder carcinoma cells for 20 mins. After 4 h the cells were irradiated with 64 J/cm²/nm laser light. The cells were pulsed with thymidine-3H after 12-24 h, harvested, and counted. DNA synthesis in the irradiated cells was reduced to 0.1% of that in control (CV-1 monkey kidney) cells. I was prepd. by reaction of (1-ethyl-1,3-dioxolane)lepidinium bromide with Et orthoformate.

IT 106807-07-2P

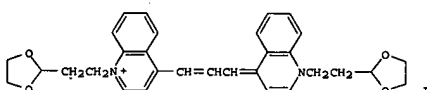
RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of, as neoplasm photosensitizer)

RN 106807-07-2 CAPLUS

CN 3H-Indolium, 1-(3-aminopropyl)-2-[7-[1-(3-aminopropyl)-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-, bromide, dihydrobromide (9CI) (CA INDEX NAME)

L15 ANSWER 52 OF 52 CAPLUS COPYRIGHT 2003 ACS
 ACCESSION NUMBER: 1987:80947 CAPLUS
 DOCUMENT NUMBER: 106:80947
 TITLE: Intramitochondrial dyes allow selective in vitro photolysis of carcinoma cells
 AUTHOR(S): Oseroff, A. R.; Ohuoha, D.; Ara, G.; McAuliffe, D.; Foley, J.; Cincotta, L.
 CORPORATE SOURCE: Dep. Dermatol., Harvard Med. Sch., Boston, MA, 02114, USA
 SOURCE: Proceedings of the National Academy of Sciences of the United States of America (1986), 83(24), 9729-33
 CODEN: PNAS6; ISSN: 0027-8424
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



AB Carcinoma cell mitochondria preferentially accumulate and retain certain cationic dyes to a much greater extent than do most normal cells. Thus, they can potentially serve as targets for highly selective photochemotherapy. Ten rhodamine and cyanine dyes were evaluated as carcinoma-specific mitochondrial photosensitizers in vitro. The most effective, N,N'-bis(2-ethyl-1,3-dioxolane)kryptocyanine (I) caused

marked,

light-dependent killing of human bladder, squamous, and colon carcinoma cell lines after 30-min incubations at 1-0.01 μM but was minimally toxic to human keratinocytes and to normal monkey kidney epithelial cells (CV-1). Carcinoma cell phototoxicity was proportional to the amt. of dye incorporated by the different cell lines. Selective killing ratios were 70-1000 for 0.1 μM dye and light doses of 100-175 J/cm² at 680-720 nm.

IT 106807-07-2

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

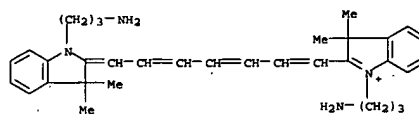
(Biological study); PROC (Process)

(metab. of, by mitochondria of normal and carcinoma cells of human, carcinoma phototherapy in relation to)

RN 106807-07-2 CAPLUS

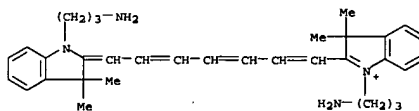
CN 3H-Indolium, 1-(3-aminopropyl)-2-[7-[1-(3-aminopropyl)-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-, bromide, dihydrobromide (9CI) (CA INDEX NAME)

L15 ANSWER 51 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

● Br⁻

● 2 HBr

L15 ANSWER 52 OF 52 CAPLUS COPYRIGHT 2003 ACS (Continued)

● Br⁻

● 2 HBr

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NEWS 29 Mar 24 Additional information for trade-named substances without
structures available in REGISTRY
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NEWS 31 Apr 14 MEDLINE Reload
NEWS 32 Apr 17 Polymer searching in REGISTRY enhanced
NEWS 33 Apr 21 Indexing from 1947 to 1956 being added to records in CA/CAPLUS
NEWS 34 Apr 21 New current-awareness alert (SDI) frequency in
WPIDS/WPINDEX/WPIX
NEWS 35 Apr 28 RDISCLOSURE now available on STN
NEWS 36 May 05 Pharmacokinetic information and systematic chemical names
added to PHAR

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
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<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> screen 964 AND 1015

L1 SCREEN CREATED

=> screen 1821 OR 1822 OR 1823 OR 1824

L2 SCREEN CREATED

=>

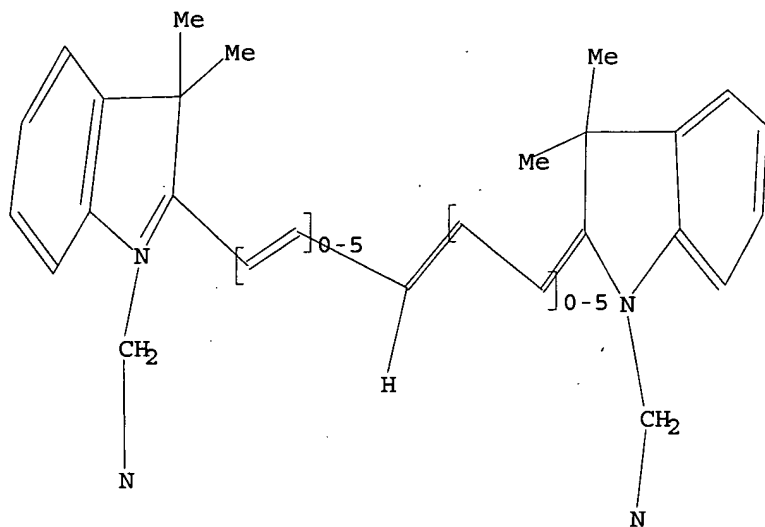
Uploading C:\STNEXP4\QUERIES\981271 elect.str

L3 STRUCTURE UPLOADED

=> que L3 AND L1 AND L2

L4 QUE L3 AND L1 AND L2

=> d
L4 HAS NO ANSWERS
L1 SCR 964 AND 1015
L2 SCR 1821 OR 1822 OR 1823 OR 1824
L3 STR



G1 O,S,N,Se
G2 A,H

Structure attributes must be viewed using STN Express query preparation.
L4 QUE ABB=ON PLU=ON L3 AND L1 AND L2

=> s l4
SAMPLE SEARCH INITIATED 12:08:12 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 0 TO 0
PROJECTED ANSWERS: 0 TO 0

L5 0 SEA SSS SAM L3 AND L1 AND L2

=> s l4 full
FULL SEARCH INITIATED 12:08:17 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2 TO ITERATE

100.0% PROCESSED 2 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

L6 0 SEA SSS FUL L3 AND L1 AND L2

=>Testing the current file.... screen

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<C

09/981,271

Page 4

=> screen 2040 AND 1993 AND 1841

L7 SCREEN CREATED

=>

Uploading C:\STNEXP4\QUERIES\981271 (Group 1 - broad).str

L8 STRUCTURE UPLOADED

=> que L8 AND L7

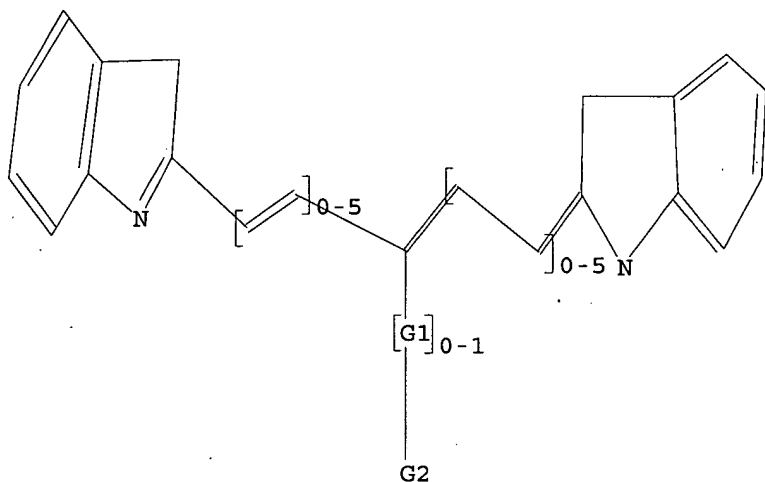
L9 QUE L8 AND L7

=> d

L9 HAS NO ANSWERS

L7 SCR 2040 AND 1993 AND 1841

L8 STR



G1 O,S,N,Se

G2 A,H

Structure attributes must be viewed using STN Express query preparation.

L9 QUE ABB=ON PLU=ON L8 AND L7

=> s l9

SAMPLE SEARCH INITIATED 12:09:23 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 425 TO ITERATE

100.0% PROCESSED 425 ITERATIONS

50 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 7264 TO 9736

PROJECTED ANSWERS: 2831 TO 4449

L10 50 SEA SSS SAM L8 AND L7

=> s l9 full

FULL SEARCH INITIATED 12:09:30 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 8366 TO ITERATE

<C

09/981,271

Page 5

100.0% PROCESSED 8366 ITERATIONS
SEARCH TIME: 00.00.01

3467 ANSWERS

L11 3467 SEA SSS FUL L8 AND L7

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

297.10

297.31

STN INTERNATIONAL LOGOFF AT 12:10:06 ON 15 MAY 2003